

(FILE 'HOME' ENTERED AT 13:03:30 ON 21 MAY 1998)

FILE 'REGISTRY' ENTERED AT 13:03:36 ON 21 MAY 1998

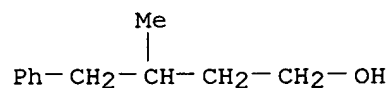
L1 SCREEN 1992  
L2 SCREEN 2016  
L3 SCREEN 2021  
L4 SCREEN 1929  
L5 SCREEN 1839  
L6 SCREEN 963 AND 1006 AND 1051  
L7 STRUCTURE UPLOADED  
L8 QUE L7 AND L6 NOT L1 NOT L2 NOT L3 NOT L4 NOT L5  
L9 0 S L8  
L10 1 S L8 FULL

FILE 'CAPLUS' ENTERED AT 13:04:30 ON 21 MAY 1998

L11 3 S L10

=> d bib ab hitstr 1-3

L11 ANSWER 1 OF 3 CAPLUS COPYRIGHT 1998 ACS  
AN 1997:706261 CAPLUS  
DN 128:3495  
TI Enantioselective carbolithiation of .beta.-alkylated styrene  
AU Norsikian, Stephanie; Marek, Ilane; Normant, Jean-F.  
CS Laboratoire de Chimie des Organoelements, associe au C.N.R.S.,  
Universite P. et M. Curie, Paris, 75252, Fr.  
SO Tetrahedron Lett. (1997), 38(43), 7523-7526  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier  
DT Journal  
LA English  
OS CASREACT 128:3495  
AB Stoichiometric or catalytic amts. of (-)-sparteine serve as promoter  
for enantioselective carbolithiation of .beta.-alkylated,  
non-functionalized styrene. For example, the carbolithiation of  
(E)-(1-butenyl)benzene in the presence of (-)-sparteine gave  
(S)-(2-ethylhexyl)benzene which was converted to the known  
(S)-3-ethyl-1-heptanol.  
IT **34126-21-1P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(stereoselective carbolithiation of .beta.-alkylated styrene)  
RN 34126-21-1 CAPLUS  
CN Benzenebutanol, .gamma.-methyl- (9CI) (CA INDEX NAME)



L11 ANSWER 2 OF 3 CAPLUS COPYRIGHT 1998 ACS  
AN 1972:564829 CAPLUS  
DN 77:164829  
TI Stereoselectivity in the carbonyl insertion reaction between  
tetracarbonyldichlorodirhodium and substituted cyclopropanes

Trying 9351006...Open

Welcome to STN International! Enter x:x

LOGINID:sssptaul26mls

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Feb 2 Web Page URLs for STN Seminar Schedule - N. America

NEWS 2 Mar 24 STN Express 4.1 with Discover! for Windows Now  
Available

NEWS 3 May 18 Variable SDI Frequencies Now Available in EMBAL

NEWS EXPRESS Discover! is Year 2000 Compliant

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS INTER General Internet Information

NEWS LOGIN Welcome Banner and News Items

NEWS PHONE Direct Dial and Telecommunication Network Access to STN

NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 12:15:06 ON 04 JUN 1998

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.15

0.15

FILE 'REGISTRY' ENTERED AT 12:15:12 ON 04 JUN 1998

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 1998 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 30 MAY 98 HIGHEST RN 206111-35-5

DICTIONARY FILE UPDATES: 3 JUN 98 HIGHEST RN 206111-35-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 14, 1998

Please note that search-term pricing does apply when conducting SmartSELECT searches.

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 963 AND 1006 AND 1051

L1 SCREEN CREATED

=>

Uploading c:\stnexp4\queries\860007b.str

L2        STRUCTURE UPLOADED

=> que L2 AND L1

L3        QUE L2 AND L1

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 964 AND 1006 AND 1051

L4        SCREEN CREATED

=>

Uploading c:\stnexp4\queries\860007a.str

L5        STRUCTURE UPLOADED

=> que L5 AND L4

L6        QUE L5 AND L4

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 963 AND 1006 AND 1051

L7        SCREEN CREATED

=>

Uploading c:\stnexp4\queries\860007.str

L8        STRUCTURE UPLOADED

=> que L8 AND L7

L9        QUE L8 AND L7

=> query

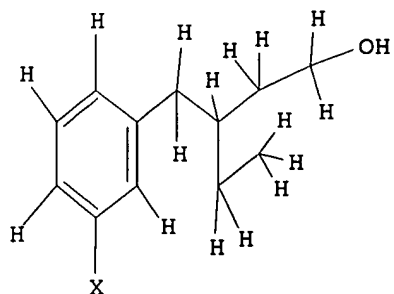
ENTER LOGIC EXPRESSION OR (END):12 or 15 or 18

L10       QUE L2 OR L5 OR L8

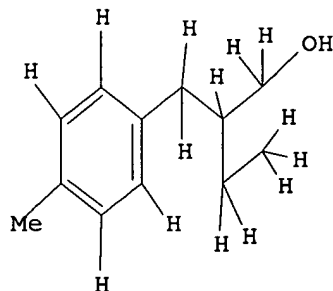
=> d 110

L10 HAS NO ANSWERS

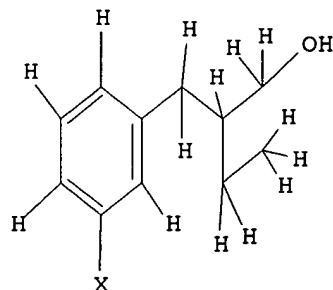
L2        STR



Structure attributes must be viewed using STN Express query preparation.  
L5 STR



Structure attributes must be viewed using STN Express query preparation.  
L8 STR



Structure attributes must be viewed using STN Express query preparation.  
L10 QUE L2 OR L5 OR L8

=> s 110

SAMPLE SEARCH INITIATED 12:17:27  
SAMPLE SCREEN SEARCH COMPLETED - 813 TO ITERATE  
100.0% PROCESSED 813 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.03

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 14550 TO 17970  
PROJECTED ANSWERS: 0 TO 0

L11 0 SEA SSS SAM L2 OR L5 OR L8

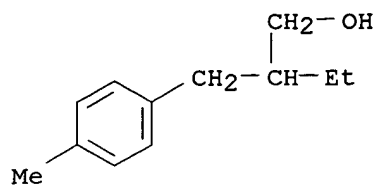
=> s 110 sss full

FULL SEARCH INITIATED 12:17:41  
FULL SCREEN SEARCH COMPLETED - 16383 TO ITERATE  
100.0% PROCESSED 16383 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.09

L12 1 SEA SSS FUL L2 OR L5 OR L8

=> d 1 sub bib

L12 ANSWER 1 OF 1 REGISTRY COPYRIGHT 1998 ACS  
RN 156054-37-4 REGISTRY  
CN Benzenepropanol, .beta.-ethyl-4-methyl- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C12 H18 O  
SR CA  
LC STN Files: CA, CAPLUS



2 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

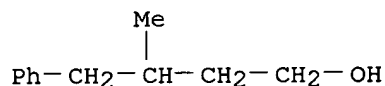
REFERENCE 1

AN 121:82711 CA  
 TI 3-(4-methylphenyl)-2-(ar)alkylpropanals, their preparation and  
 fragrance application  
 IN Kleemiss, Wolfgang; Kalz, Thomas  
 PA Huels AG, Germany  
 SO Ger. Offen., 6 pp.  
 CODEN: GWXXBX  
 PI DE 4236887 A1 940505  
 AI DE 92-4236887 921031  
 DT Patent  
 LA German

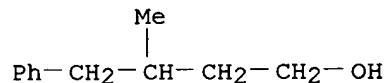
REFERENCE 2

AN 121:82702 CA  
 TI 3-(4-methylphenyl)-2-(ar)alkylpropan-1-ols, process for their  
 preparation and use in fragrance applications  
 IN Kleemiss, Wolfgang; Kaufhold, Manfred  
 PA Huels AG, Germany  
 SO Ger. Offen., 6 pp.  
 CODEN: GWXXBX  
 PI DE 4236889 A1 940505  
 AI DE 92-4236889 921031  
 DT Patent  
 LA German

AU McQuillin, F. J.; Powell, K. G.  
 CS Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle-upon-Tyne,  
 Engl.  
 SO J. Chem. Soc., Dalton Trans. (1972), (19), 2129-33  
 CODEN: JC DTBI  
 DT Journal  
 LA English  
 AB The in-section reaction between [Rh(CO)<sub>2</sub>Cl]<sub>2</sub> and phenyl- or  
 benzyl-cyclopropane, or bicyclo [4.1.0]heptane was examd. and the  
 struc-tures of the products deduced by NaBH<sub>4</sub> redn.; e.g.,  
 [Rh(CO)<sub>2</sub>Cl]<sub>2</sub> with phenylcyclopropane at 60.degree. gave the  
 1-chloro-1-carbonyl-5-phenylrhodacyclopentan-2-one (I) which gave  
 Ph(CH<sub>2</sub>)<sub>4</sub>OH on redn. Prolonged heating with [Rh(CO)<sub>2</sub>Cl]<sub>2</sub> caused  
 isomeriza-tion of the cyclopropane to olefin.  
 IT **34126-21-1P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)  
 RN 34126-21-1 CAPLUS  
 CN Benzenebutanol, .gamma.-methyl- (9CI) (CA INDEX NAME)



L11 ANSWER 3 OF 3 CAPLUS COPYRIGHT 1998 ACS  
 AN 1971:529929 CAPLUS  
 DN 75:129929  
 TI Reactions of cyclopropanes with dicarbonylchlororhodium. Carbonyl  
 insertion and isomerization  
 AU McQuillin, F. J.; Powell, K. G.  
 CS Dep. Org. Chem., Univ. Newcastle-upon-Tyne, Newcastle-upon-Tyne,  
 Engl.  
 SO J. Chem. Soc. D. (1971), (16), 931-2  
 CODEN: CCJDAO  
 DT Journal  
 LA English  
 AB With [Rh(CO)<sub>2</sub>Cl]<sub>2</sub>, phenylcyclopropane underwent stereoselective ring  
 fission to give the carbonyl inserted product (I) and PhCH:CHMe;  
 benzylcyclopropane and bicyclo[4.1.0]heptane reacted similarly.  
 IT **34126-21-1P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)  
 RN 34126-21-1 CAPLUS  
 CN Benzenebutanol, .gamma.-methyl- (9CI) (CA INDEX NAME)



CN Formaldehyde, compd. with [S-(R\*,R\*)]-.beta.-amino-.alpha.-  
(chloromethyl)benzenepropanol (1:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzenepropanol, .beta.-amino-.alpha.-(chloromethyl)-, [S-(R\*,R\*)]-,  
compd. with formaldehyde (1:1) (9CI)

FS STEREOSEARCH

MF C10 H14 Cl N O . C H2 O

SR CA

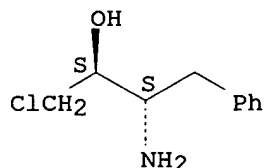
LC STN Files: CA, CAPLUS

CM 1

CRN 160232-67-7

CMF C10 H14 Cl N O

Absolute stereochemistry.



CM 2

CRN 50-00-0

CMF C H2 O

H<sub>2</sub>C=O

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 126:31265 CA

TI Preparation of tetrahydrofuran-containing sulfonamide inhibitors of  
aspartyl protease for treatment of HIV infection.

IN Tung, Roger D.

PA Vertex Pharmaceuticals Incorporated, USA

SO PCT Int. Appl., 105 pp

CODEN: PIXXD2

PI WO 9633184 A1 961024

DS W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,  
ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,  
LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,  
SG, SI

RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB,  
GR, IE, IT, LU, MC, ML, NL, PT, SE

AI WO 96-US5475 960418

PRAI US 95-424819 950419

DT Patent

LA English

=> d 2 sub bib

L13 ANSWER 2 OF 6 REGISTRY COPYRIGHT 1998 ACS

RN 186497-72-3 REGISTRY

CN Benzenepropanol, 4-bromo-.beta.-methyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

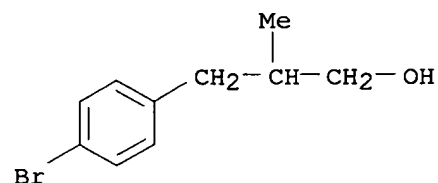
CN 2-Methyl-3-(4-bromophenyl)-1-propanol

CN 4-Bromo-.beta.-methylbenzenepropanol

FS 3D CONCORD

MF C10 H13 Br O

SR CA  
LQ STN Files: CA, CAPLUS



3 REFERENCES IN FILE CA (1967 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 127:50629 CA  
TI Preparation of substituted biphenylsulfonamide derivatives as endothelin antagonists  
IN Marugesan, Natesan; Barrish, Joel C.; Lloyd, John  
PA Bristol-Myers Squibb Company, Japan  
SO Jpn. Kokai Tokkyo Koho, 23 pp.  
CODEN: JKXXAF  
PI JP 09124620 A2 970513 Heisei  
AI JP 96-262859 961003  
PRAI US 95-60007032 951011  
DT Patent  
LA Japanese

REFERENCE 2

AN 126:343561 CA  
TI Preparation of N-isoxazolyl-biphenylsulfonamides as endothelin antagonists  
IN Murugesan, Natesan; Barrish, Joel C.; Lloyd, John  
PA Bristol-Myers Squibb Company, USA  
SO Eur. Pat. Appl., 33 pp.  
CODEN: EPXXDW  
PI EP 768305 A1 970416  
DS R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE  
AI EP 96-116095 961008  
PRAI US 95-7032 951011  
DT Patent  
LA English

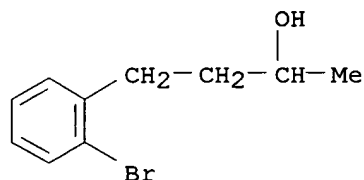
REFERENCE 3

AN 126:144291 CA  
TI N-pyrazinyl-2-phenyl-3-pyridinesulfonamides and analogs endothelin receptor antagonists  
IN Bradbury, Robert Hugh; Butlin, Roger John; James, Roger  
PA Zeneca Limited, UK  
SO PCT Int. Appl., 108 pp.  
CODEN: PIXXD2  
PI WO 9640681 A1 961219  
DS W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG  
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, NL, PT, SE  
AI WO 96-GB1295 960603  
PRAI GB 95-11507 950607  
GB 95-19666 950927  
DT Patent  
LA English



=> d 5-6 sub bib

L13 ANSWER 5 OF 6 REGISTRY COPYRIGHT 1998 ACS  
RN 67130-96-5 REGISTRY  
CN Benzenepropanol, 2-bromo-.alpha.-methyl- (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN **2-Bromo-.alpha.-methylbenzenepropanol**  
FS 3D CONCORD  
MF C10 H13 Br O  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT, CJACS  
(\*File contains numerically searchable property data)



5 REFERENCES IN FILE CA (1967 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 128:282703 CA  
TI Preparation of aryl ethers  
IN Buchwald, Stephen L.; Wolfe, John P.; Palucki, Michael  
PA Massachusetts Institute of Technology, USA; Buchwald, Stephen L.;  
Wolfe, John P.; Palucki, Michael  
SO PCT Int. Appl., 72 pp.  
CODEN: PIXXD2  
PI WO 9815515 A1 980416  
DS W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,  
DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,  
RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN,  
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB,  
GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG  
AI WO 97-US18719 971010  
PRAI US 96-728449 961010  
DT Patent  
LA English

REFERENCE 2

AN 126:7946 CA  
TI Synthesis of Oxygen Heterocycles via a Palladium-Catalyzed C-O  
Bond-Forming Reaction  
AU Palucki, Michael; Wolfe, John P.; Buchwald, Stephen L.  
CS Department of Chemistry, Massachusetts Institute of Technology,  
Cambridge, MA, 02139, USA  
SO J. Am. Chem. Soc. (1996), 118(42), 10333-10334  
CODEN: JACSAT; ISSN: 0002-7863  
PB American Chemical Society  
DT Journal  
LA English

REFERENCE 3

AN 106:195544 CA  
TI Lithium-halogen exchange-initiated cyclization reactions. 3.  
Intramolecular conjugate addition reactions of unsaturated  
acylphosphoranes  
AU Cooke, Manning P., Jr.; Widener, Rexford K.  
CS Dep. Chem., Washington State Univ., Pullman, WA, 99164, USA

SO J. Org. Chem. (1987), 52(8), 1381-96  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English

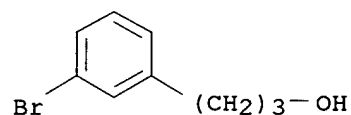
REFERENCE 4

AN 96:6277 CA  
TI Selective halogen-lithium exchange in some secondary and tertiary  
(bromophenyl)alkyl halides  
AU Parham, William E.; Bradsher, Charles K.; Reames, David C.  
CS Paul M. Gross Chem. Lab., Duke Univ., Durham, NC, 27706, USA  
SO J. Org. Chem. (1981), 46(23), 4804-6  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English

REFERENCE 5

AN 89:107234 CA  
TI Nucleophilic aromatic substitution by organostannylsodiums. A  
second-order reaction displaying a solvent cage effect  
AU Wursthorn, Karl R.; Kuivila, Henry G.; Smith, Gary F.  
CS Dep. Chem., State Univ. New York, Albany, N. Y., USA  
SO J. Am. Chem. Soc. (1978), 100(9), 2779-89  
CODEN: JACSAT; ISSN: 0002-7863  
DT Journal  
LA English

L13 ANSWER 6 OF 6 REGISTRY COPYRIGHT 1998 ACS  
RN 65537-54-4 REGISTRY  
CN Benzenepropanol, 3-bromo- (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 3-(3-Bromophenyl)-1-propanol  
CN **3-Bromobenzenepropanol**  
FS 3D CONCORD  
MF C9 H11 Br O  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT, CJACS, IFICDB,  
IFIPAT, IFIUDB, TOXLIT, USPATFULL  
(\*File contains numerically searchable property data)



10 REFERENCES IN FILE CA (1967 TO DATE)  
10 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 128:114790 CA  
TI Preparation of biphenylamidines as anticoagulants for inhibition and  
treatment of thrombus and embolus  
IN Nomoto, Takashi; Kawamoto, Hiroshi; Sato, Sadashi; Honma, Mitsuki;  
Miyaji, Mitsuru; Takaenoki, Yoko  
PA Banyu Pharmaceutical Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 26 pp.  
CODEN: JKXXAF  
PI JP 10001467 A2 980106 Heisei  
AI JP 96-174219 960613  
DT Patent  
LA Japanese

REFERENCE 2

AN 127:358794 CA  
TI Aminoisoquinolines and aminothienopyridine derivatives and their use

as anti-inflammatory agents  
IN Hamley, Peter; Macdonald, James; Matz, James; Tinker, Alan  
PA Astra Pharmaceuticals Ltd., UK; Astra Aktiebolag; Hamley, Peter;  
Macdonald, James; Matz, James; Tinker, Alan  
SO PCT Int. Appl., 92 pp.  
CODEN: PIXXD2  
PI WO 9738977 A1 971023  
DS W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,  
DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,  
LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,  
PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ,  
VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB,  
GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG  
AI WO 97-SE589 970409  
PRAI GB 96-7717 960413  
GB 96-8678 960426  
GB 96-10892 960524  
DT Patent  
LA English

REFERENCE 3

AN 127:26625 CA  
TI Preparation of liquid crystal cyclohexylbenzene compounds containing  
halogen and alkenyl groups and liquid crystal composition  
IN Haseba, Yasuhiro; Koga, Koji; Matsui, Shuichi; Miyazawa, Kazutoshi;  
Sekiguchi, Yasuko; Nakagawa, Etsuo  
PA Chisso Corp., Japan  
SO Jpn. Kokai Tokkyo Koho, 97 pp.  
CODEN: JKXXAF  
PI JP 09077703 A2 970325 Heisei  
AI JP 95-258186 950911  
DT Patent  
LA Japanese

REFERENCE 4

AN 120:54536 CA  
TI Oxazole and imidazole derivatives as prostaglandin analogs and  
thromboxane receptor antagonists  
IN Misra, Raj N.; Das, Jagabandhu; Hall, Steven E.; Han, Wen Ching;  
Sher, Philip M.; Stein, Philip D.  
PA Squibb, E. R., and Sons, Inc., USA  
SO Eur. Pat. Appl., 92 pp.  
CODEN: EPXXDW  
PI EP 536713 A1 930414  
DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT,  
SE  
AI EP 92-117099 921007  
PRAI US 91-772830 911007  
DT Patent  
LA English

REFERENCE 5

AN 111:214378 CA  
TI Displacements at the nitrogen of lithioalkoxylamides by  
organometallic reagents  
AU Beak, Peter; Selling, Gordon W.  
CS Dep. Chem., Univ. Illinois, Urbana, IL, 61801, USA  
SO J. Org. Chem. (1989), 54(23), 5574-80  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English

REFERENCE 6

AN 96:98909 CA  
TI Isolation and identification of mercapturic acids of cinnamic

aldehyde and cinnamyl alcohol from urine of female rats  
AU Delbressine, L. P. C.; Klippert, P. J. M.; Reuvers, J. T. A.;  
Seutter-Berlage, F.  
CS Dep. Pharmacol., Univ. Nijmegen, Nijmegen, NL-6500 HB, Neth.  
SO Arch. Toxicol. (1981), 49(1), 57-64  
CODEN: ARTODN; ISSN: 0340-5761  
DT Journal  
LA English

REFERENCE 7

AN 93:132142 CA  
TI Methylenecyclopentane derivatives  
IN Morton, Douglas R., Jr.  
PA Upjohn Co., USA  
SO U.S., 21 pp. Division of U.S. Ser. No. 764,332 abandoned.  
CODEN: USXXAM  
PI US 4195178 800325  
AI US 76-691792 760601  
DT Patent  
LA English

REFERENCE 8

AN 92:146342 CA  
TI Methylenecyclopentane derivatives  
IN Morton, Douglas R., Jr.  
PA Upjohn Co., USA  
SO U.S., 22 pp.  
CODEN: USXXAM  
PI US 4181798 800101  
AI US 76-691792 760601  
DT Patent  
LA English

REFERENCE 9

AN 89:108349 CA  
TI 4,5,6-Trinor-3,7-inter-m-phenylene prostaglandin F1.alpha. analogs  
IN Nelson, Norman A.  
PA Upjohn Co., USA  
SO U.S., 36 pp.  
CODEN: USXXAM  
PI US 4084058 780411  
AI US 75-604158 750813  
DT Patent  
LA English

REFERENCE 10

AN 88:104766 CA  
TI Optically active phenyl derivatives of prostaglandins  
PA Upjohn Co., USA  
SO Neth. Appl., 88 pp.  
CODEN: NAXXAN  
PI NL 7608823 770215  
PRAI US 75-604158 750813  
DT Patent  
LA Dutch

=> file uspat

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	29.72	29.87

FILE 'USPATFULL' ENTERED AT 14:14:35 ON 05 JUN 1998  
CA INDEXING COPYRIGHT (C) 1998 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 2 Jun 1998 (19980602/PD)

FILE LAST UPDATED: 3 Jun 1998 (19980603/ED)  
HIGHEST PATENT NUMBER: US5761741  
CA INDEXING IS CURRENT THROUGH 3 Jun 1998 (19980603/UPCA)  
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 2 Jun 1998 (19980602/PD)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Mar 1998  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 1998

>>> Page images are available for patents from 1/1/95. Current <<<  
>>> week patent text is typically loaded by Thursday morning and <<<  
>>> page images are available for display by the end of the day. <<<  
>>> Image data for the /FA field are available the following week. <<<

>>> Complete CA file indexing for chemical patents (or equivalents) <<<  
>>> is included in file records. A thesaurus is available for the <<<  
>>> USPTO Manual of Classifications in the /NCL, /INCL, and /RPCL <<<  
>>> fields. This thesaurus includes catchword terms from the <<<  
>>> USPTO/MOC subject headings and subheadings. Thesauri are also <<<  
>>> available for the WIPO International Patent Classification <<<  
>>> (IPC) Manuals, editions 1-6, in the /IC1, /IC2, /IC3, /IC4, <<<  
>>> /IC5, and /IC (/IC6) fields, respectively. The thesauri in <<<  
>>> the /IC5 and /IC fields include the corresponding catchword <<<  
>>> terms from the IPC subject headings and subheadings. <<<

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> d his

(FILE 'HOME' ENTERED AT 14:07:19 ON 05 JUN 1998)

FILE 'REGISTRY' ENTERED AT 14:07:42 ON 05 JUN 1998

L1 SCREEN 963 AND 1006 AND 1051  
L2 STRUCTURE UPLOADED  
L3 QUE L2 AND L1  
L4 SCREEN 963 AND 1006 AND 1051  
L5 STRUCTURE UPLOADED  
L6 QUE L5 AND L4  
L7 STRUCTURE UPLOADED  
L8 QUE L7  
L9 QUERY L2 OR L5 NOT L7  
L10 0 SEARCH L9  
L11 6599 S BENZENEPROPANOL  
L12 2590878 S CHLORO OR BROMO  
L13 6 S L12(2W)L11

FILE 'USPATFULL' ENTERED AT 14:14:35 ON 05 JUN 1998

=> s 113

L14 5 L13

=> d 1

L14 ANSWER 1 OF 5 USPATFULL  
AN 1998:22250 USPATFULL  
TI THF-containing sulfonamide inhibitors of aspartyl protease  
IN Tung, Roger D., Arlington, MA, United States  
PA Vertex Pharmaceuticals Incorporated, Cambridge, MA, United States  
(U.S. corporation)  
PI US 5723490 980303  
AI US 95-424819 950419 (8)  
RLI Continuation-in-part of Ser. No. US 95-393460, filed on 23 Feb  
1995, now abandoned which is a continuation-in-part of Ser. No. US  
93-142327, filed on 24 Nov 1993, now patented, Pat. No. US 5585397  
which is a continuation-in-part of Ser. No. US 92-941982, filed on  
8 Sep 1992, now abandoned  
DT Utility  
LN.CNT 2481

INCL INCLM: 514/478.000  
INCLS: 514/477.000; 514/588.000; 514/050.000  
NCL NCLM: 514/478.000  
NCLS: 514/050.000; 514/477.000; 514/588.000  
IC [6]  
ICM: A61K031-27  
ICS: A61K031-17; A61K031-70  
EXF 514/50; 514/478; 514/497; 514/588  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 1 hit

L14 ANSWER 1 OF 5 USPATFULL

IT 3217-94-5P, Cyclopentanecarboxamide 24924-72-9P 62992-68-1P  
88915-26-8P 95798-23-5P 120278-07-1P 159141-66-9P  
160230-41-1P 160231-30-1P 160231-33-4P 160232-08-6P  
160232-45-1P 160232-54-2P 160232-56-4P 160232-62-2P  
160232-63-3P **160232-68-8P** 160232-69-9P 160232-70-2P  
160232-71-3P 160232-72-4P 160232-91-7P 160232-99-5P  
160233-19-2P 160233-23-8P 169814-97-5P 184357-17-3P  
184357-20-8P 184357-21-9P 184357-36-6P 184357-37-7P  
184357-38-8P 184357-39-9P 184357-40-2P 184357-41-3P  
184357-42-4P 186463-17-2P 186463-23-0P 203851-90-5P  
203851-91-6P 203851-92-7P 203851-93-8P 203851-95-0P  
203851-96-1P 203851-97-2P 203851-98-3P 203851-99-4P  
203852-00-0P 203852-01-1P 203852-02-2P 203852-03-3P  
203852-04-4P 203852-05-5P 203852-06-6P 203852-07-7P  
203852-08-8P 203852-09-9P 203852-10-2P 203852-11-3P  
203852-12-4P  
(prepn. of THF-contg. sulfonamides as inhibitors of aspartyl  
protease)

=> d 2-4

L14 ANSWER 2 OF 5 USPATFULL

AN 96:116404 USPATFULL  
TI Sulfonamide inhibitors of aspartyl protease  
IN Tung, Roger D., Arlington, MA, United States  
Murcko, Mark A., Holliston, MA, United States  
Bhisetti, Govinda R., Lexington, MA, United States  
PA Vertex Pharmaceuticals, Incorporated, Cambridge, MA, United States  
(U.S. corporation)  
PI US 5585397 961217  
WO 9405639 940317  
AI US 93-142327 931124 (8)  
WO 93-US8458 930907  
930907 PCT 371 date  
930907 PCT 102(e) date  
RLI Continuation-in-part of Ser. No. US 92-941982, filed on 8 Sep  
1992, now abandoned  
DT Utility  
LN.CNT 7153  
INCL INCLM: 514/473.000  
INCLS: 514/464.000; 549/475.000; 549/448.000; 546/169.000  
NCL NCLM: 514/473.000  
NCLS: 514/464.000; 546/169.000; 549/448.000; 549/475.000  
IC [6]  
ICM: C07D407-12  
ICS: C07D307-20; A61K031-34  
EXF 546/169; 549/475; 549/448; 514/473; 514/464  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 3 OF 5 USPATFULL

AN 80:15170 USPATFULL  
TI Methylenecyclopentane derivatives  
IN Morton, Jr., Douglas R., Portage, MI, United States  
PA The Upjohn Company, Kalamazoo, MI, United States (U.S.  
corporation)

PI US 4195178 800325  
AI US 78-947689 781002 (5)  
RLI Division of Ser. No. US 77-764332, filed on 31 Jan 1977, now  
abandoned which is a continuation-in-part of Ser. No. US  
76-691792, filed on 1 Jun 1976, now abandoned  
DT Utility  
LN.CNT 1404  
INCL INCLM: 542/426.000  
INCLS: 542/429.000; 568/838.000; 260/347.800; 260/333.000  
NCL NCLM: 549/214.000  
NCLS: 549/312.000; 549/346.000; 549/415.000; 549/417.000;  
549/421.000; 549/472.000; 549/473.000; 549/475.000;  
549/476.000; 568/838.000  
IC [2]  
ICM: C07D407-08  
ICS: C07D407-14  
EXF 568/838; 542/426  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 4 OF 5 USPATFULL  
AN 80:999 USPATFULL  
TI Methylenecyclopentane derivatives  
IN Morton, Jr., Douglas R., Portage, MI, United States  
PA The Upjohn Company, Kalamazoo, MI, United States (U.S.  
corporation)  
PI US 4181798 800101  
AI US 78-947688 781002 (5)  
RLI Continuation-in-part of Ser. No. US 77-764332, filed on 31 Jan  
1977, now abandoned which is a continuation-in-part of Ser. No. US  
76-691792, filed on 1 Jun 1976, now abandoned  
DT Utility  
LN.CNT 1540  
INCL INCLM: 542/426.000  
INCLS: 568/838.000  
NCL NCLM: 549/214.000  
NCLS: 549/346.000; 549/415.000; 549/472.000; 549/473.000;  
568/838.000  
IC [2]  
ICM: C07D407-08  
EXF 568/838; 542/426  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 2-4 hit

L14 ANSWER 2 OF 5 USPATFULL  
IT 1080-11-1P 1828-66-6P, 4-Morpholinesulfonyl chloride 4295-99-2P  
6053-81-2P, Aminomethylcyclopentane 23905-46-6P 25506-37-0P  
30293-86-8P 32939-32-5P 35856-62-3P, 1-Piperidinesulfonyl  
chloride 52206-05-0P 52665-49-3P, 3-Furansulfonyl chloride  
54981-39-4P 87001-32-9P, 4-Benzyloxybenzenesulfonyl chloride  
102522-17-8P 114322-14-4P, 2,1,3-Benzoxadiazole-4-sulfonyl  
chloride 115010-10-1P, 1,3-Benzodioxole-5-sulfonyl chloride  
115010-11-2P, 2,3-Dihydrobenzofuran-5-sulfonyl chloride  
116586-32-4P 130290-79-8P 132682-22-5P 132682-23-6P  
134807-06-0P 134807-20-8P 138499-08-8P 143224-83-3P  
159006-03-8P 159006-20-9P 159141-66-9P 160231-97-0P  
160231-98-1P 160231-99-2P 160232-00-8P 160232-01-9P  
160232-02-0P 160232-03-1P 160232-05-3P 160232-06-4P  
160232-08-6P 160232-09-7P 160232-10-0P 160232-11-1P  
160232-12-2P 160232-13-3P 160232-14-4P 160232-15-5P,  
2,1,3-Benzoxadiazole-4-sulfonic acid 160232-17-7P 160232-18-8P  
160232-19-9P, 2,1,3-Benzoxadiazole-5-thiol 160232-20-2P,  
2,1,3-Benzoxadiazole-5-sulfonyl chloride 160232-22-4P  
160232-23-5P 160232-24-6P 160232-25-7P 160232-26-8P  
160232-27-9P 160232-28-0P 160232-29-1P 160232-30-4P  
160232-31-5P 160232-32-6P 160232-33-7P 160232-34-8P  
160232-36-0P 160232-37-1P 160232-38-2P 160232-39-3P  
160232-40-6P 160232-41-7P 160232-42-8P 160232-43-9P  
160232-44-0P 160232-45-1P 160232-46-2P 160232-47-3P

160232-48-4P 160232-49-5P 160232-50-8P 160232-51-9P  
 160232-52-0P 160232-53-1P 160232-54-2P 160232-56-4P  
 160232-60-0P 160232-61-1P 160232-62-2P 160232-63-3P  
 160232-64-4P 160232-65-5P 160232-66-6P **160232-68-8P**  
 160232-69-9P 160232-70-2P 160232-71-3P 160232-72-4P  
 160232-73-5P 160232-74-6P 160232-75-7P 160232-76-8P  
 160232-77-9P 160232-78-0P 160232-79-1P 160232-80-4P  
 160232-81-5P 160232-82-6P 160232-83-7P 160232-84-8P  
 160232-85-9P 160232-86-0P 160232-87-1P 160232-89-3P  
 160232-91-7P 160232-92-8P 160232-93-9P 160232-94-0P  
 160232-95-1P 160232-96-2P 160232-97-3P 160232-98-4P  
 160232-99-5P 160233-00-1P 160233-01-2P 160233-02-3P  
 160233-03-4P 160233-04-5P 160233-05-6P 160233-06-7P  
 160233-07-8P 160233-08-9P 160233-09-0P 160233-12-5P  
 160233-13-6P 160233-19-2P 160233-21-6P 160233-22-7P  
 160233-23-8P 160233-24-9P 160233-31-8P 160333-46-0P  
 160333-47-1P 160333-49-3P 160333-50-6P 182750-81-8P  
 184357-14-0P 184357-17-3P 186463-21-8P 186463-22-9P  
 186463-23-0P 186463-24-1P 186463-25-2P 186463-26-3P  
 186463-27-4P 186463-28-5P 186463-29-6P 186463-30-9P  
 186463-31-0P 186463-32-1P 186463-33-2P 186463-35-4P  
 186463-37-6P 186463-39-8P

(prepn. of sulfonamide inhibitors of aspartyl protease)

L14 ANSWER 3 OF 5 USPATFULL

IT 591-20-8 **65537-54-4**  
(silylation of)

L14 ANSWER 4 OF 5 USPATFULL

IT 591-20-8 **65537-54-4**  
(silylation of)

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

6.79

36.66

STN INTERNATIONAL LOGOFF AT 14:16:38 ON 05 JUN 1998



L1 SCREEN CREATED

=>

Uploading c:\stnexp4\queries\860007d.str

L2 STRUCTURE UPLOADED

=> que L2 AND L1

L3 QUE L2 AND L1

=> s 13

SAMPLE SEARCH INITIATED 15:43:27

SAMPLE SCREEN SEARCH COMPLETED - 176 TO ITERATE

100.0% PROCESSED 176 ITERATIONS

9 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 2725 TO 4315

PROJECTED ANSWERS: 9 TO 360

L4 9 SEA SSS SAM L2 AND L1

=> d 1 sub bib

L4 ANSWER 1 OF 9 REGISTRY COPYRIGHT 1998 ACS

RN 182686-37-9 REGISTRY

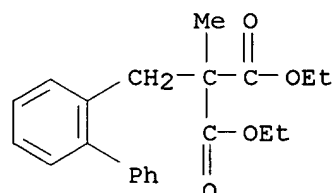
CN Propanedioic acid, ([1,1'-biphenyl]-2-ylmethyl)methyl-, diethyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C21 H24 O4

SR CA

LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 125:276900 CA

TI Manufacture of .alpha.-olefin polymers in the presence of highly active catalysts containing transition metal complexes and aluminoxanes

IN Sugano, Toshihiko

PA Mitsubishi Chem Corp, Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

PI JP 08208733 A2 960813 Heisei

AI JP 95-14440 950131

DT Patent

LA Japanese

=> screen

ENTER SCREEN EXPRESSION OR (END):1839

L5 SCREEN CREATED

=> query

ENTER LOGIC EXPRESSION OR (END):13 not 15

L3 MAY NOT BE USED HERE

The L-number entered was not created by a STRUCTURE or SCREEN command.

=> query

ENTER LOGIC EXPRESSION OR (END):12 not 15

L6 QUE L2 NOT L5

=> s 16

SAMPLE SEARCH INITIATED 15:45:12

SAMPLE SCREEN SEARCH COMPLETED - 65 TO ITERATE

100.0% PROCESSED 65 ITERATIONS

6 ANSWERS

SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 817 TO 1783

PROJECTED ANSWERS: 6 TO 266

L7 6 SEA SSS SAM L2 NOT L5

=> d 1 sub bib

L7 ANSWER 1 OF 6 REGISTRY COPYRIGHT 1998 ACS

RN 144872-09-3 REGISTRY

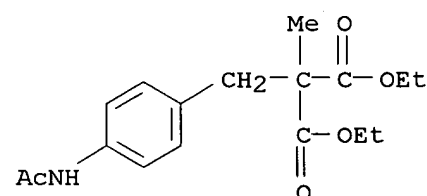
CN Propanedioic acid, [[4-(acetylamino)phenyl]methyl]methyl-, diethyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C17 H23 N O5

SR CA

LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 118:101720 CA

TI Preparation of 8-substituted purines as selective adenosine receptor agents

IN Peet, Norton P.; Dudley, Mark W.; Lentz, Nelsen L.

PA Merrell Dow Pharmaceuticals, Inc., USA

SO Eur. Pat. Appl., 42 pp.

CODEN: EPXXDW

PI EP 503563 A2 920916

DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE

AI EP 92-104089 920310

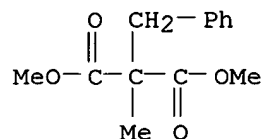
PRAI US 91-667943 910312

DT Patent

LA English

=> d 2 sub bib

L7 ANSWER 2 OF 6 REGISTRY COPYRIGHT 1998 ACS  
 RN 120681-58-5 REGISTRY  
 CN Propanedioic acid, methyl(phenylmethyl)-, dimethyl ester, (R)- (9CI)  
 (CA INDEX NAME)  
 MF C13 H16 O4  
 SR CA  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS  
 (\*File contains numerically searchable property data)



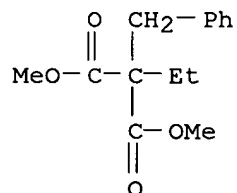
1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 110:210971 CA  
 TI Enzymic manufacture of optically active malonic acid monoesters from  
 the corresponding diesters  
 IN Hult, Karl; Boutelje, John; Gatenbeck, Sten; Norin, Torbjoern;  
 Bjoerkling, Fredrik  
 PA Swed.  
 SO Swed., 11 pp.  
 CODEN: SSXXAY  
 PI SE 453599 B 880215  
 AI SE 85-2051 850426  
 DT Patent  
 LA Swedish

=> d 3 sub bib

L7 ANSWER 3 OF 6 REGISTRY COPYRIGHT 1998 ACS  
 RN 113741-14-3 REGISTRY  
 CN Propanedioic acid, ethyl(phenylmethyl)-, dimethyl ester (9CI) (CA  
 INDEX NAME)  
 FS 3D CONCORD  
 MF C14 H18 O4  
 SR CA  
 LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

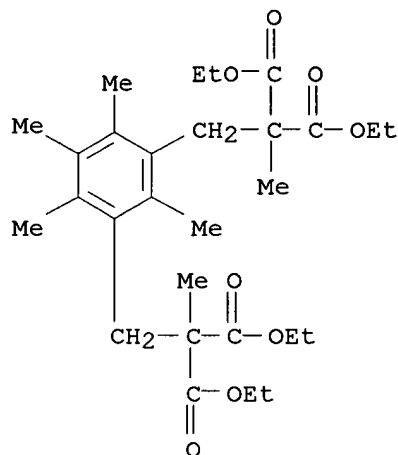
REFERENCE 1

AN 108:146043 CA  
 TI Computer graphics as a tool for the prediction of the  
 stereoselectivity of enzyme catalyzed reactions.  
 .alpha.-Chymotrypsin catalyzed hydrolysis of substituted  
 propanedioic acid diesters  
 AU Bjoerkling, Fredrik; Norin, Torbjoern; Szmulik, Peter; Boutelje,

John; Hult, Karl; Kraulis, Per  
 CS Dep. Org. Chem., R. Inst. Technol., Stockholm, S-100 44, Swed.  
 SO Biocatalysis (1987), 1(1), 87-98, 2 plates  
 CODEN: BIOCED; ISSN: 0886-4454  
 DT Journal  
 LA English

=> d 4 sub bib

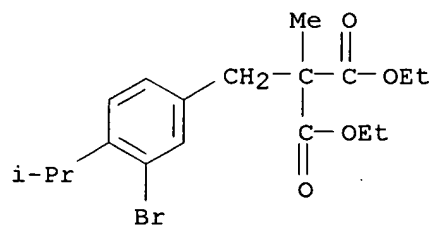
L7 ANSWER 4 OF 6 REGISTRY COPYRIGHT 1998 ACS  
 RN 97355-07-2 REGISTRY  
 CN Malonic acid, [(tetramethyl-m-phenylene)dimethylene]bis[methyl-,  
 tetraethyl ester (7CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C28 H42 O8  
 SR CAOLD  
 LC STN Files: BEILSTEIN\*, CAOLD  
 (\*File contains numerically searchable property data)



1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d 5 sub bib

L7 ANSWER 5 OF 6 REGISTRY COPYRIGHT 1998 ACS  
 RN 70146-89-3 REGISTRY  
 CN Propanedioic acid, [[3-bromo-4-(1-methylethyl)phenyl]methyl]methyl-,  
 diethyl ester (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C18 H25 Br O4  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXLIT  
 (\*File contains numerically searchable property data)



1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 90:179912 CA

TI Quantitative relationships between structure and fibrinolytic activity in the series of .alpha.-methyl-.beta.-arylpropionic acids  
AU Kuchar, Miroslav; Rejholec, Vaclav; Roubal, Zdenek; Nemecek, Oldrich  
CS Res. Inst. Pharm. Biochem., Prague, Czech.  
SO Collect. Czech. Chem. Commun. (1979), 44(1), 183-93  
CODEN: CCCCAK; ISSN: 0366-547X  
DT Journal  
LA English

=> s 16 sss full

FULL SEARCH INITIATED 15:47:16  
FULL SCREEN SEARCH COMPLETED - 1238 TO ITERATE  
100.0% PROCESSED 1238 ITERATIONS 128 ANSWERS  
SEARCH TIME: 00.00.02

L8 128 SEA SSS FUL L2 NOT L5

=> file ca

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	127.02	127.17

FILE 'CA' ENTERED AT 15:47:26 ON 05 JUN 1998  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 1998 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE COVERS 1967 - 2 Jun 1998 (980602/ED) VOL 128 ISS 23

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 18

L9 106 L8

=> s arylpropanol? or benzenepropanol? or phenylpropanol?

42 ARYLPROPANOL?  
195 BENZENEPROPANOL?  
1488 PHENYLPROPANOL?  
L10 1713 ARYLPROPANOL? OR BENZENEPROPANOL? OR PHENYLPROPANOL?

=> s 19 and 110

L11 0 L9 AND L10

=> d 19 1

L9 ANSWER 1 OF 106 CA COPYRIGHT 1998 ACS  
AN 127:358066 CA  
TI Simple dissolution-reaction model for enzymic conversion of suspension of solid substrate  
AU Wolff, A.; Zhu, L.; Kielland, V.; Straathof, A. J. J.; Jongejan, J. A.; Heijnen, J. J.  
CS Department Biochemical Engineering, Delft University Technology, Delft, NL-2628 BC, Neth.  
SO Biotechnol. Bioeng. (1997), 56(4), 433-440  
CODEN: BIBIAU; ISSN: 0006-3592  
PB Wiley  
DT Journal  
LA English

=> d 2-106 an ti

L11 HAS NO ANSWERS

'AN TI ' IS NOT A VALID STRUCTURE FORMAT KEYWORD

Structure Formats

SIA ----- Structure Image, Attributes, and map table if it contains data. (Default)

SIM ----- Structure Image.

SAT ----- Structure ATtributes and map table if it contains data.

SCT ----- Structure Connection Table and map table if it contains data.

SDA ----- All Structure DATA (image, attributes, connection table and map table if it contains data).

NOS ----- NO Structure data.

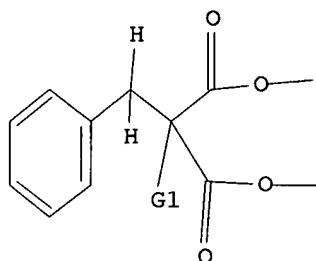
ENTER STRUCTURE FORMAT (SIA), SCT, SDA, SIM, SAT, NOS:

<-----User Break----->

ENTER STRUCTURE FORMAT (SIA), SCT, SDA, SIM, SAT, NOS:.

L2

STR



G1 Me,Et,n-Pr

Structure attributes must be viewed using STN Express query preparation.

L5 SCR 1839

L8 128 SEA FILE=REGISTRY SSS FUL L2 NOT L5

L9 106 SEA FILE=CA L8

L10 1713 SEA FILE=CA ARYLPROPANOL? OR BENZENEPROPANOL? OR PHENYLPROPANOL?

L11 0 SEA FILE=CA L9 AND L10

=> d 19 2 hit

L9 ANSWER 2 OF 106 CA COPYRIGHT 1998 ACS

IT 77497-74-6P 79261-58-8P 79276-05-4P 80102-92-7P 99953-00-1P  
189093-95-6P 189094-48-2P 194857-79-9P 194857-81-3P  
**194857-83-5P** 194857-84-6P 194857-85-7P 194857-86-8P  
194857-88-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of dimethyltyrosyl isoquinolinecarboxylate derivs. as  
.delta. opioid antagonists)

=> d 19 3-106 an hit

L9 ANSWER 3 OF 106 CA COPYRIGHT 1998 ACS

AN 126:301343 CA

IT **189287-72-7P** 189287-77-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and sapon. of)

L9 ANSWER 4 OF 106 CA COPYRIGHT 1998 ACS

AN 126:144291 CA

IT 588-96-5P, 1-Bromo-4-ethoxybenzene 874-31-7P, 2-Amino-5-chloro-3-methoxypyrazine 1006-63-9P 1458-03-3P 2156-04-9P,  
4-Vinylphenylboronic acid 6684-06-6P, 2-Chloro-3-pyridinesulfonyl chloride 16152-51-5P, 4-Isopropylphenylboronic acid 17865-11-1P

22237-13-4P, 4-Ethoxyphenylboronic acid 33332-29-5P,  
 2-Amino-5-chloropyrazine 36603-49-3P, 2-(4-Bromophenoxy)-2H-  
 tetrahydropyran 39969-56-7P, 1-Bromo-4-propoxybenzene  
 49660-93-7P, 1-(4-Bromophenyl)-2-methyl-1-propanone 63139-21-9P,  
 4-Ethylphenylboronic acid 66735-01-1P, 2-Methyl-3-(4-  
 bromophenyl)propanoic acid **70146-85-9P**, Diethyl  
 2-(4-bromobenzyl)-2-methylmalonate 74290-65-6P,  
 2-Amino-3-bromo-5-methylpyrazine 76537-18-3P, 2-Amino-3-bromo-5-  
 chloropyrazine 81183-58-6P 89464-87-9P, 2-Amino-3-methoxy-5-  
 methylpyrazine 91011-76-6P, 4-(Diethylamino)phenylboronic acid  
 96833-41-9P, 5-Amino-2-chloro-4-methoxypyrimidine 99768-12-4P,  
 4-Methoxycarbonylphenylboronic acid 101251-09-6P,  
 4-Acetamidophenylboronic acid 123324-71-0P, 4-tert-  
 Butylphenylboronic acid 134150-01-9P, 4-Propylphenylboronic acid  
 175885-77-5P, Dimethyl(3-pyridyl)borane 179251-28-6P  
 179251-29-7P 182281-01-2P 186497-45-0P 186497-46-1P  
 186497-47-2P 186497-48-3P 186497-49-4P 186497-50-7P  
 186497-51-8P 186497-52-9P 186497-53-0P, 4-Nitrophenyl  
 2-chloropyridine-3-sulfonate 186497-54-1P 186497-55-2P  
 186497-56-3P 186497-57-4P 186497-58-5P 186497-59-6P  
 186497-60-9P 186497-61-0P 186497-62-1P 186497-63-2P  
 186497-64-3P 186497-65-4P 186497-66-5P 186497-67-6P,  
 4-Propoxyphenylboronic acid 186497-68-7P 186497-69-8P  
 186497-70-1P 186497-71-2P 186497-72-3P, 2-Methyl-3-(4-  
 bromophenyl)-1-propanol 186497-73-4P 186497-74-5P 186497-75-6P  
 186497-76-7P 186497-77-8P 186497-78-9P 186497-79-0P,  
 4-Allylphenylboronic acid 186497-80-3P 186497-81-4P  
 186497-82-5P 186497-83-6P 186497-84-7P, 4-(2-Methyl-2-  
 propenyl)phenylboronic acid 186497-85-8P 186497-86-9P  
 186497-87-0P 186497-88-1P 186497-89-2P 186497-90-5P  
 186497-91-6P 186497-92-7P 186497-93-8P 186497-94-9P  
 186497-95-0P 186497-96-1P 186497-97-2P 186497-98-3P  
 186497-99-4P 186498-00-0P 186498-01-1P 186498-02-2P,  
 4-Morpholinophenylboronic acid 186498-03-3P 186498-04-4P  
 186498-05-5P 186498-06-6P 186498-07-7P 186498-08-8P  
 186498-09-9P, 1-(4-Bromophenoxy)-2-methyl-2-propanol 186498-10-2P  
 186498-11-3P 186498-12-4P, 1-(4-Bromophenoxy)-2-methyl-1-propanol  
 186498-13-5P 186498-14-6P 186498-15-7P 186498-16-8P  
 186498-17-9P 186498-18-0P 186498-19-1P 186498-20-4P  
 186498-21-5P 186498-22-6P 186498-23-7P, 2-(4-Bromophenyl)-2-  
 propyl-1,3-dioxolane 186498-24-8P 186498-25-9P 186498-26-0P  
 186498-27-1P 186498-28-2P 186498-29-3P 186498-30-6P  
 186498-31-7P 186498-32-8P 186498-33-9P 186498-35-1P  
 186498-37-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of n-pyrazinyl-2-phenyl-3-pyridinesulfonamides and  
 analogs endothelin receptor antagonists)

L9 ANSWER 5 OF 106 CA COPYRIGHT 1998 ACS

AN 125:248797 CA

IT 66191-99-9P 66192-08-3P **66192-12-9P** 66192-21-0P  
 93098-67-0P 102539-53-7P, 4-Bromo-3-methyl-1-indanone  
 112549-07-2P 174702-59-1P 174702-74-0P 174702-75-1P  
 174702-76-2P 175649-09-9P 182056-57-1P 182056-62-8P  
 182056-68-4P 182056-74-2P 182188-80-3P 182188-81-4P  
 182188-82-5P 182188-83-6P 182188-86-9P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation)  
 (intermediate in metallocene catalyst manuf.; aluminoxane-free  
 catalyst for manuf. of polyolefins with good particle properties)

L9 ANSWER 6 OF 106 CA COPYRIGHT 1998 ACS

AN 125:248793 CA

IT **66192-12-9P** 149080-24-0P 174702-59-1P 182056-40-2P  
 182056-62-8DP, diastereomeric derivs. 182056-68-4P 182056-74-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and reaction in manuf. of metallocene catalysts for  
 polymn. of .alpha.-olefins)

L9 ANSWER 7 OF 106 CA COPYRIGHT 1998 ACS

AN 125:221062 CA

IT **55114-30-2P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (intermediate; synthesis of benzylpropionic acid)

L9 ANSWER 8 OF 106 CA COPYRIGHT 1998 ACS  
 AN 124:9404 CA  
 IT 1009-67-2P 38385-67-0P **55114-30-2P** 118970-92-6P  
 118970-96-0P 127986-89-4P 171080-58-3P 171080-59-4P  
 171234-86-9P 171234-87-0P 171234-89-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (optically active aminoazirines in synthesis of  
 methylphenylalanine synthons and some model peptides)

L9 ANSWER 9 OF 106 CA COPYRIGHT 1998 ACS  
 AN 123:341302 CA  
 IT 452-63-1P, 2-Bromo-5-fluorotoluene 609-08-5P, Diethyl  
 methylmalonate 923-06-8P, 2-Bromosuccinic acid 7719-09-7P,  
 Thionyl chloride **170927-02-3P** 170927-03-4P  
 170927-04-5P 170927-05-6P 170927-06-7P 170927-07-8P  
 170927-08-9P 170927-09-0P  
 RL: CAT (Catalyst use); RCT (Reactant); SPN (Synthetic preparation);  
 PREP (Preparation); USES (Uses)  
 (reaction in prepn. of halogenated bisphenylindenyl transition  
 metal complexes as polymn. catalysts)

L9 ANSWER 10 OF 106 CA COPYRIGHT 1998 ACS  
 AN 123:256359 CA  
 IT 585-50-2P, 3-(3-Trifluoromethylphenyl)propionic acid 53473-36-2P,  
 3-(4-Trifluoromethylphenyl)propionic acid 94022-99-8P,  
 3-(2-Trifluoromethylphenyl)propionic acid 168833-77-0P,  
 3-(3-Trifluoromethoxyphenyl)propionic acid **168833-78-1P**,  
 Diethyl 2-methyl-2-(3-trifluoromethylphenyl)malonate 168833-79-2P,  
 2-Methyl-3-(3-trifluoromethylphenyl)propionic acid  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of (phenylalkanoyl)guanidines with perfluoroalkyl groups  
 as sodium-hydrogen antiporter inhibitors)

L9 ANSWER 11 OF 106 CA COPYRIGHT 1998 ACS  
 AN 123:188478 CA  
 IT 128-37-0, Ionol, biological studies 128-37-0D, Ionol, derivs.  
 616-55-7 67739-15-5 67739-21-3 132030-09-2 132030-10-5  
 132030-11-6 **132030-12-7** 132030-14-9 132030-15-0  
 132054-20-7 132054-21-8 132054-22-9 132054-23-0 167773-31-1  
 RL: BAC (Biological activity or effector, except adverse); THU  
 (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (protective effects of lipo- and water-sol. ionol antioxidants on  
 liver cytochrome P 450 system during lipid peroxidn.)

L9 ANSWER 12 OF 106 CA COPYRIGHT 1998 ACS  
 AN 123:143767 CA  
 IT 18880-00-7P **162821-86-5P** 162821-88-7P 166375-83-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (asym. chemoenzymic synthesis of fenpropimorph)

L9 ANSWER 13 OF 106 CA COPYRIGHT 1998 ACS  
 AN 123:56334 CA  
 IT **131780-99-9P** 131781-62-9P 131781-63-0P 142909-98-6P  
 164225-02-9P 164225-03-0P 164225-04-1P 164225-05-2P  
 164225-09-6P 164225-10-9P 164575-84-2P 164575-85-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn., properties, and receptor binding of both enantiomers of  
 DAU 5750)

L9 ANSWER 14 OF 106 CA COPYRIGHT 1998 ACS  
 AN 123:55499 CA  
 IT 351-54-2P, 3-Fluoro-4-methoxybenzaldehyde 1550-35-2P,  
 2,4-Difluorobenzaldehyde 5464-10-8P, 6-Methoxy-2-methylindanone  
 16204-11-8P 17304-68-6P 22138-69-8P, ..alpha..-Methyl-..beta..-  
 (p-methylthiophenyl) propionic acid 22138-72-3P,  
 p-Fluoro-..alpha..-methylcinnamic acid 22138-73-4P,



p-Fluoro-.alpha.-methylhydrocinnamic acid 27961-57-5P, Ethyl  
2-hydroxy-2-(p-methoxyphenyl)-1-methylpropionate 32004-52-7P  
32004-54-9P 32004-55-0P, 3,4-Difluoro-.alpha.-methylcinnamic  
acid 32004-56-1P 32004-57-2P, 5,6-Difluoro-2-methyl-1-indanone  
32004-58-3P 32004-59-4P 32004-62-9P 32004-63-0P,  
5-Fluoro-6-methoxy-2-methylindanone 32004-64-1P 32004-65-2P  
32004-66-3P 32004-67-4P 32004-70-9P, 2,4-Difluoro-.alpha.-  
methylcinnamic acid 32004-71-0P 32004-72-1P,  
4,6-Difluoro-2-methylindanone 32004-73-2P 32004-75-4P  
32040-88-3P 33036-54-3P 34036-07-2P, 3,4-Difluorobenzaldehyde  
37794-19-7P, 6-Fluoro-2-methylindanone 50703-56-5P 52427-11-9P,  
..alpha.-Methyl-.beta.-(p-methoxyphenyl)propionic acid  
99046-64-7P 142958-52-9P 142988-15-6P **144871-78-3P**  
145900-54-5P 145900-55-6P 145900-59-0P 145928-09-2P  
145928-10-5P 164394-18-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(use of substituted sulfonyl indenylacetic and -propionic acids  
and esters for treatment of precancerous lesions)

L9 ANSWER 15 OF 106 CA COPYRIGHT 1998 ACS

AN 123:9313 CA

IT 37699-43-7P 68707-69-7P **162821-86-5P** 163593-69-9P,  
4-Methoxy-2,3-dimethylpyridine 163593-70-2P 163593-71-3P  
163593-72-4P 163593-73-5P 163593-74-6P 163593-75-7P  
163593-76-8P 163593-77-9P 163593-78-0P 163593-79-1P  
163593-80-4P 163593-81-5P 163593-82-6P 163593-83-7P  
163593-84-8P 163593-85-9P 163593-86-0P 163593-87-1P  
163593-88-2P 163593-89-3P 163593-90-6P 163593-92-8P  
163593-93-9P 163593-94-0P 163593-95-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of quinazolidineethanols as ergosterol aza analogs)

L9 ANSWER 16 OF 106 CA COPYRIGHT 1998 ACS

AN 122:289049 CA

IT **162821-86-5P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and decarboxylation of)

L9 ANSWER 17 OF 106 CA COPYRIGHT 1998 ACS

AN 122:31546 CA

IT 1009-67-2P 2437-08-3P 5669-16-9P 6149-41-3P 14367-54-5P  
14367-67-0P 25177-85-9P 34917-00-5P **55114-30-2P**  
81250-33-1P 81250-34-2P 85677-12-9P 98191-23-2P 102284-73-1P  
102284-74-2P 123162-26-5P 130277-37-1P 130277-38-2P  
130404-30-7P 130404-31-8P 137685-73-5P 137685-75-7P  
137685-76-8P 137685-77-9P 137685-78-0P 137685-80-4P  
137685-81-5P 137685-82-6P 137685-83-7P 137685-84-8P  
137685-85-9P 137706-77-5P 159722-55-1P 159722-56-2P  
159722-57-3P 159722-58-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of xanthine-deriv. adenosine A1 receptor antagonists)

L9 ANSWER 18 OF 106 CA COPYRIGHT 1998 ACS

AN 121:300564 CA

IT **159179-25-6** 159249-19-1 159249-20-4

RL: RCT (Reactant)  
(failed; prepn. of optically active ketone by palladium-induced  
cascade reaction from racemic .beta.-keto ester)

L9 ANSWER 19 OF 106 CA COPYRIGHT 1998 ACS

AN 121:35028 CA

IT **155827-64-8P** 155827-65-9P 155827-66-0P 155827-67-1P  
155827-68-2P 155827-69-3P 155827-70-6P 155827-71-7P  
155827-72-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and reaction of, in prepn. of pesticide)

L9 ANSWER 20 OF 106 CA COPYRIGHT 1998 ACS

AN 121:8791 CA

IT 4438-01-1P 13738-64-2P, 2-(Butoxymethyl)phenol 14680-18-3P

20920-83-6P, Phenol, 2-ethoxymethyl 33316-78-8P, Phenol,  
2-(1-methylethoxy)methyl 65538-44-5P 146425-43-6P 151291-56-4P  
155441-05-7P, 2-(2-Nitro-2-phenylethyl)phenol 155441-08-0P  
155441-09-1P 155441-10-4P **155441-11-5P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, from [(benzotriazolyl)alkyl]phenol)

L9 ANSWER 21 OF 106 CA COPYRIGHT 1998 ACS  
AN 120:244286 CA  
IT 5217-04-9P 26673-29-0P 41975-67-1P **55114-30-2P**  
91910-16-6P 137344-17-3P 138536-55-7P 138536-59-1P  
138536-62-6P 138536-72-8P 154194-02-2P 154194-04-4P  
154194-05-5P 154194-06-6P 154194-07-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)  
IT 77320-46-8 134079-01-9 138536-54-6 **138536-56-8**  
138536-57-9 138536-58-0 154194-00-0  
RL: RCT (Reactant)  
(reactant, in cyclization by stannyl anion generated from  
tributyltrimethylsilylstannane and benzyltriethylammonium  
chloride)

L9 ANSWER 22 OF 106 CA COPYRIGHT 1998 ACS  
AN 119:108172 CA  
IT 94-21-3 106-92-3 495-76-1, 1,3-Benzodioxole-5-methanol  
867-13-0 5465-67-8 15190-10-0 **77611-64-4**  
RL: ANST (Analytical study)  
(identification of large mol. fragment in, using IR spectra  
database)

L9 ANSWER 23 OF 106 CA COPYRIGHT 1998 ACS  
AN 119:95001 CA  
IT 112818-04-9 134079-01-9 **138536-56-8** 138536-57-9  
147973-92-0  
RL: RCT (Reactant)  
(cyclization of, by stannyl anion generated from  
(trimethylsilyl)tributylstannane and fluoride ion)

L9 ANSWER 24 OF 106 CA COPYRIGHT 1998 ACS  
AN 119:89821 CA  
IT 1069-38-1 4358-88-7 14189-95-8 15399-27-6 16108-06-8  
30697-69-9 62436-70-8 **95929-64-9** 149198-62-9  
RL: RCT (Reactant)  
(reaction of, with chymotrypsin, calcn. of enantioselectivity in)

L9 ANSWER 25 OF 106 CA COPYRIGHT 1998 ACS  
AN 118:147318 CA  
IT 4371-04-4P 7598-70-1P 19157-51-8P 110270-80-9P  
**135460-43-4P** 135460-53-6P 135460-79-6P 135460-80-9P  
144404-37-5P 144842-69-3P 144842-70-6P 144842-71-7P  
144842-72-8P 144842-76-2P 144842-77-3P 144842-78-4P  
144842-80-8P 144842-81-9P 144842-82-0P 144842-83-1P  
144842-84-2P 144842-85-3P 144842-86-4P 144842-88-6P  
144842-89-7P 144842-90-0P 144842-91-1P 144842-92-2P  
144842-93-3P 144842-94-4P 144842-96-6P 144842-98-8P  
144842-99-9P 144843-01-6P 144843-02-7P 144843-04-9P  
144843-05-0P 144843-06-1P 144843-09-4P 144843-10-7P  
144843-11-8P 144843-12-9P 144863-05-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and reaction of, in prepn. of diagnostic and therapeutic  
chelants)

L9 ANSWER 26 OF 106 CA COPYRIGHT 1998 ACS  
AN 118:147290 CA  
IT 7598-70-1P 21626-93-7P 119822-20-7P 119822-21-8P  
**135460-43-4P** 135460-44-5P 135460-45-6P 144404-12-6P  
144404-13-7P 144404-15-9P 144404-16-0P 144404-18-2P  
144404-20-6P 144404-21-7P 144404-22-8P 144404-23-9P  
144404-25-1P 144404-26-2P 144404-27-3P 144404-28-4P  
144404-29-5P 144404-30-8P 144404-31-9P 144404-32-0P

144404-33-1P 144404-34-2P 144404-35-3P 144404-37-5P  
144404-38-6P 144404-39-7P 144404-40-0P 144404-42-2P  
144943-47-5P 144943-48-6P 144943-49-7P 144943-51-1P  
144943-52-2P 144943-53-3P 144943-54-4P 144962-60-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and reaction of, in prepn. of diagnostic and therapeutic  
chelating agents)

L9 ANSWER 27 OF 106 CA COPYRIGHT 1998 ACS

AN 118:101720 CA

IT 22138-69-8P 81579-29-5P 123162-26-5P 123392-36-9P  
133273-97-9P 133778-23-1P 144871-72-7P 144871-73-8P  
144871-74-9P 144871-75-0P 144871-76-1P 144871-77-2P  
**144871-78-3P** 144871-79-4P 144871-80-7P 144871-81-8P  
144871-82-9P 144871-83-0P 144871-84-1P 144871-85-2P  
144871-86-3P 144871-87-4P 144871-88-5P 144871-89-6P  
144871-90-9P 144871-91-0P 144871-92-1P 144871-93-2P  
144871-94-3P 144871-95-4P 144871-96-5P 144871-97-6P  
144871-98-7P 144871-99-8P 144872-00-4P 144872-01-5P  
144872-02-6P 144872-03-7P 144872-04-8P 144872-05-9P  
144872-06-0P 144872-07-1P 144872-08-2P **144872-09-3P**  
**144872-10-6P** 144872-11-7P 144872-12-8P 144872-13-9P  
144872-14-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and reaction of, in prepn. of adenosine receptor  
antagonists)

L9 ANSWER 28 OF 106 CA COPYRIGHT 1998 ACS

AN 118:101671 CA

IT 351-54-2P, 3-Fluoro-4-methoxybenzaldehyde 1550-35-2P,  
2,4-Difluorobenzaldehyde 5464-10-8P, 6-Methoxy-2-methylindanone  
16204-11-8P 17304-68-6P 22138-69-8P 22138-72-3P,  
p-Fluoro-.alpha.-methylcinnamic acid 22138-73-4P,  
p-Fluoro-.alpha.-methylhydrocinnamic acid 27961-57-5P  
32004-52-7P 32004-54-9P 32004-55-0P 32004-56-1P 32004-57-2P  
32004-58-3P 32004-59-4P 32004-62-9P 32004-63-0P 32004-64-1P  
32004-65-2P 32004-66-3P 32004-67-4P 32004-68-5P 32004-70-9P  
32004-71-0P 32004-72-1P 32004-73-2P 32004-75-4P 32040-88-3P  
32165-56-3P 33036-54-3P 33036-55-4P 33036-56-5P 33036-57-6P  
34036-07-2P, 3,4-Difluorobenzaldehyde 37794-19-7P,  
6-Fluoro-2-methylindanone 38194-50-2P 50703-56-5P 99046-64-7P  
142958-46-1P 142958-47-2P 142958-48-3P 142958-51-8P  
142958-52-9P 142988-13-4P 142988-15-6P **144871-78-3P**  
145900-48-7P 145900-49-8P 145900-50-1P 145900-51-2P  
145900-52-3P 145900-53-4P 145900-54-5P 145900-55-6P  
145900-56-7P 145900-57-8P 145900-58-9P 145900-59-0P  
145900-60-3P 145900-61-4P 145928-08-1P 145928-09-2P  
145928-10-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as intermediate for anticancer agent)

L9 ANSWER 29 OF 106 CA COPYRIGHT 1998 ACS

AN 117:233535 CA

IT 52252-58-1P 144344-86-5P 144344-87-6P 144344-88-7P  
144344-89-8P **144344-90-1P** 144344-91-2P 144344-92-3P  
144344-93-4P 144344-94-5P 144344-95-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 30 OF 106 CA COPYRIGHT 1998 ACS

AN 117:7850 CA

IT **141352-95-6P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and acid hydrolysis-decarboxylation of)

L9 ANSWER 31 OF 106 CA COPYRIGHT 1998 ACS

AN 116:83341 CA

IT **138089-93-7P 138089-94-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and decarboxylation of)

L9 ANSWER 32 OF 106 CA COPYRIGHT 1998 ACS  
 AN 116:83317 CA  
 IT **118688-45-2P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and sapon. of)

L9 ANSWER 33 OF 106 CA COPYRIGHT 1998 ACS  
 AN 116:79776 CA  
 IT **95929-64-9**  
 RL: RCT (Reactant)  
 (transesterification of, stereoselective, with benzyl alc. in  
 org. solvents, enzyme-catalyzed)

L9 ANSWER 34 OF 106 CA COPYRIGHT 1998 ACS  
 AN 116:58915 CA  
 IT 5217-04-9P 26673-29-0P 41975-67-1P **55114-30-2P**  
 63831-51-6P 67714-28-7P 91910-16-6P 137344-17-3P  
 138536-48-8P 138536-49-9P 138536-51-3P 138536-52-4P  
 138536-53-5P 138536-55-7P 138536-60-4P 138536-61-5P  
 138536-62-6P 138536-64-8P 138536-65-9P 138536-67-1P  
 138536-68-2P 138536-69-3P 138536-70-6P 138536-71-7P  
 138536-72-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

IT 99-49-0 930-68-7, 2-Cyclohexen-1-one 112818-04-9 134079-00-8  
 134079-01-9 137344-19-5 138536-50-2 138536-54-6  
**138536-56-8** 138536-57-9 138536-58-0 138536-59-1  
 138536-63-7 138536-66-0  
 RL: RCT (Reactant)  
 (reaction of, with stannyl anion generated from  
 tributyl(trimethylsilyl)stannane in presence of quaternary  
 ammonium halides)

L9 ANSWER 35 OF 106 CA COPYRIGHT 1998 ACS  
 AN 116:6578 CA  
 IT 1009-67-2P 2437-08-3P 5669-16-9P 6149-41-3P 14367-54-5P  
 14367-67-0P 25177-85-9P 34917-00-5P **55114-30-2P**  
 81250-33-1P, 1,3-Dipropyl-5-nitroso-6-aminouracil 81250-34-2P  
 85677-12-9P 98191-23-2P 102284-73-1P 102284-74-2P  
 128544-04-7P 130277-37-1P 130277-38-2P 130404-30-7P  
 130404-31-8P 137685-73-5P 137685-74-6P 137685-75-7P  
 137685-76-8P 137685-77-9P 137685-78-0P 137685-79-1P  
 137685-80-4P 137685-81-5P 137685-82-6P 137685-83-7P  
 137685-84-8P 137685-85-9P 137706-77-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as intermediate for selective adenosine receptor  
 agent)

L9 ANSWER 36 OF 106 CA COPYRIGHT 1998 ACS  
 AN 115:255826 CA  
 IT 4371-04-4P 7598-70-1P 10255-94-4P 53651-72-2P 119822-20-7P  
 119822-21-8P **135460-43-4P** 135460-44-5P 135460-45-6P  
 135460-46-7P 135460-47-8P 135460-48-9P 135460-49-0P  
 135460-50-3P 135460-51-4P 135460-52-5P 135460-53-6P  
 135460-54-7P 135460-55-8P 135460-56-9P 135460-57-0P  
 135460-58-1P 135460-59-2P 135460-60-5P 135460-61-6P  
 135460-62-7P 135460-63-8P 135460-64-9P 135460-65-0P  
 135460-66-1P 135460-67-2P 135460-68-3P 135460-69-4P  
 135460-70-7P 135460-71-8P 135460-72-9P 135460-73-0P  
 135460-74-1P 135460-75-2P 135460-76-3P 135460-77-4P  
 135460-78-5P 135460-79-6P 135460-80-9P 135460-81-0P  
 135460-82-1P 135460-83-2P 135460-84-3P 135460-85-4P  
 135460-86-5P 135460-87-6P 135460-88-7P 135460-89-8P  
 135460-90-1P 135460-91-2P 135484-16-1P 135484-41-2P  
 135484-42-3P 135484-43-4P 135546-86-0P 137164-59-1P  
 137164-60-4P 137164-61-5P 138339-82-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and reaction of, in prepn. of ligands and radioactive  
 isotope complexes)

L9 ANSWER 37 OF 106 CA COPYRIGHT 1998 ACS  
 AN 115:114819 CA  
 IT **132629-17-5P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn., hydrolysis, and decarboxylation of)

L9 ANSWER 38 OF 106 CA COPYRIGHT 1998 ACS  
 AN 114:159616 CA  
 IT **95929-64-9** 102508-03-2  
 RL: BIOL (Biological study)  
 (carboxylesterase isoenzymes of liver enantiotopic selectivity  
 for, DMSO effect on)

L9 ANSWER 39 OF 106 CA COPYRIGHT 1998 ACS  
 AN 114:123020 CA  
 IT **132629-17-5P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and enzymic hydrolysis of, with esterase)

IT **132629-16-4P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and selective enzymic hydrolysis of, with esterase,  
 stereochem. of)

L9 ANSWER 40 OF 106 CA COPYRIGHT 1998 ACS  
 AN 114:81865 CA  
 IT 59803-35-9P 131780-91-1P 131780-92-2P, 5-Fluoro-2-  
 nitrobenzylamine 131780-93-3P, 5-Carbamoyl-2-nitrobenzylamine  
 131780-94-4P, 2-Hydroxy-6-nitrobenzylamine hydrochloride  
 131780-95-5P, 2-Methyl-6-nitrobenzylamine 131780-96-6P,  
 2-Methyl-3-nitrobenzylamine 131780-97-7P, 4-Fluoro-2-  
 nitrobenzylamine 131780-98-8P **131780-99-9P**  
 131781-00-5P 131781-01-6P 131781-02-7P 131781-03-8P  
 131781-04-9P 131781-05-0P 131781-06-1P 131781-07-2P  
 131781-08-3P 131781-09-4P 131781-10-7P 131781-11-8P  
 131781-12-9P 131781-13-0P 131781-14-1P 131781-15-2P  
 131781-16-3P 131781-17-4P 131781-18-5P 131781-19-6P  
 131781-20-9P 131781-21-0P 131781-22-1P 131781-23-2P  
 131781-24-3P 131781-25-4P 131781-26-5P 131781-27-6P  
 131781-28-7P 131781-29-8P 131781-30-1P 131781-31-2P  
 131781-32-3P 131781-33-4P 131781-34-5P 131781-35-6P  
 131781-36-7P 131781-37-8P 131781-38-9P 131781-39-0P  
 131781-40-3P 131781-41-4P 131781-42-5P 131781-43-6P  
 131781-44-7P 131781-45-8P 131781-46-9P 131781-47-0P  
 131781-48-1P 131781-49-2P 131781-50-5P 131781-51-6P  
 131781-52-7P 131781-53-8P 131781-54-9P 131781-55-0P  
 131781-56-1P 131781-57-2P 131781-58-3P 131781-59-4P  
 131781-60-7P 131781-61-8P 131781-62-9P 131781-63-0P  
 131799-59-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and reaction of, in prepn. of antimuscarinic agent)

L9 ANSWER 41 OF 106 CA COPYRIGHT 1998 ACS  
 AN 114:74727 CA  
 IT 1020-31-1 67739-15-5 67739-21-3 132030-09-2 132030-10-5  
 132030-11-6 **132030-12-7** 132030-13-8 132030-14-9  
 132030-15-0 132054-20-7 132054-21-8 132054-22-9 132054-23-0  
 RL: PRP (Properties)  
 (antioxidant effects of, in biol. membranes, structure in  
 relation to)

L9 ANSWER 42 OF 106 CA COPYRIGHT 1998 ACS  
 AN 114:74726 CA  
 IT 1020-31-1 67739-15-5 67739-21-3 132030-09-2 132030-10-5  
 132030-11-6 **132030-12-7** 132030-13-8 132030-14-9  
 132030-15-0 132054-20-7 132054-21-8 132054-22-9 132054-23-0  
 RL: PRP (Properties)  
 (antioxidant effects of, structure in relation to)

L9 ANSWER 43 OF 106 CA COPYRIGHT 1998 ACS

AN 113:171992 CA  
 IT **21118-89-8P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and bromination of)

L9 ANSWER 44 OF 106 CA COPYRIGHT 1998 ACS  
 AN 112:216849 CA  
 IT 76-67-5, Diethyl ethylphenylmalonate 76-72-2 93-58-3,  
 Methylbenzoate 99-75-2, Methyl-p-toluate 121-98-2,  
 Methyl-p-anisate 3195-24-2, Diethyl diallylmalonate  
**76154-00-2**  
 RL: RCT (Reactant)  
 (electrochem. reaction of, with urea)

L9 ANSWER 45 OF 106 CA COPYRIGHT 1998 ACS  
 AN 112:179015 CA  
 IT 76-67-5 76-72-2 77-25-8 3195-24-2 **76154-00-2**  
 RL: RCT (Reactant)  
 (electrochem. reaction of, with urea, barbituric acid from)

L9 ANSWER 46 OF 106 CA COPYRIGHT 1998 ACS  
 AN 112:21367 CA  
 IT 597-55-7P 607-81-8P **55114-30-2P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and redn. of)

L9 ANSWER 47 OF 106 CA COPYRIGHT 1998 ACS  
 AN 112:20729 CA  
 IT 3526-45-2P 4895-96-9P 4992-02-3P 5355-17-9P,  
 4-(Methoxymethyl)phenol 5635-98-3P, 2-(Methoxymethyl)phenol  
 15451-07-7P 24619-86-1P 33033-90-8P, 4-(Anilinomethyl)phenol  
 45966-19-6P 54373-27-2P 55116-30-8P, 2-(Azidomethyl)phenol  
 55116-31-9P, 4-(Azidomethyl)phenol 66287-29-4P 77094-90-7P  
 92196-19-5P 112621-26-8P 112621-27-9P 120677-37-4P  
 124389-46-4P 124389-47-5P 124389-50-0P 124389-51-1P  
 124389-52-2P, 4-Hydroxycinnamyl azide 124389-53-3P  
**124389-54-4P** 124389-55-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

L9 ANSWER 48 OF 106 CA COPYRIGHT 1998 ACS  
 AN 111:39187 CA  
 IT 121482-58-4P **121482-62-0P** 121482-65-3P 121482-70-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and cyclocondensation of, with tetrahydrophthalic  
 anhydride, in prepn. of herbicide)  
 IT 55417-40-8P **121482-60-8P** 121482-67-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and nitration of, in prepn. of herbicide)  
 IT 121482-57-3P **121482-61-9P** 121482-64-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and redn. of, in prepn. of herbicide)

L9 ANSWER 49 OF 106 CA COPYRIGHT 1998 ACS  
 AN 111:7047 CA  
 IT **52086-50-7P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and sapon. of)

L9 ANSWER 50 OF 106 CA COPYRIGHT 1998 ACS  
 AN 110:210971 CA  
 IT 21186-54-9P 99531-07-4P **120681-58-5P**  
 RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP  
 (Preparation)  
 (manuf. of, from corresponding diester, by enzymic resoln.)

L9 ANSWER 51 OF 106 CA COPYRIGHT 1998 ACS  
 AN 110:153913 CA  
 IT **118688-44-1P 118688-45-2P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(prepn. and hydrogenation of)  
IT **118688-46-3P 118688-47-4P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and sapon.-decarboxylation of)

L9 ANSWER 52 OF 106 CA COPYRIGHT 1998 ACS  
AN 110:82286 CA  
IT **94430-87-2P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and decarboxylation of)

L9 ANSWER 53 OF 106 CA COPYRIGHT 1998 ACS  
AN 108:146043 CA  
IT **113741-14-3**  
RL: BIOL (Biological study)  
(chymotrypsin interaction with)

IT 49769-78-0 **95929-64-9**  
RL: RCT (Reactant)  
(hydrolysis of, by chymotrypsin, kinetics of, enzyme substrate  
specificity and stereoselectivity prediction in relation to)

IT 607-81-8 **5846-22-0 21118-89-8 55114-30-2**  
RL: RCT (Reactant)  
(hydrolysis of, by chymotrypsin, product chirality in)

L9 ANSWER 54 OF 106 CA COPYRIGHT 1998 ACS  
AN 108:5839 CA  
IT 76-72-2P 77-25-8P 103-29-7P 580-35-8P, 2,4,6-Triphenylpyridine  
2049-66-3P 6731-58-4P 71501-13-8P 73062-47-2P 73086-80-3P  
73286-97-2P **76154-00-2P** 107449-78-5P 111784-48-6P  
111784-49-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 55 OF 106 CA COPYRIGHT 1998 ACS  
AN 106:192586 CA  
IT 67-52-7DP, Barbituric acid, trimethoxybenzyl derivs. 50846-63-4P  
50846-64-5P 50846-65-6P 50846-66-7P 50846-67-8P 50846-68-9P  
50846-70-3P **50846-72-5P** 50846-73-6P 50846-75-8P  
50846-76-9P 51031-82-4P **51031-83-5P** 51031-84-6P  
56543-92-1P 56543-93-2P 56543-94-3P 56543-95-4P 56543-96-5P  
56543-97-6P 56543-98-7P 56543-99-8P 56544-00-4P 56544-01-5P  
56544-03-7P 56596-63-5P 56596-64-6P 57882-23-2P  
**77611-64-4P** 108097-05-8P 108097-06-9P 108097-07-0P  
108097-08-1P 108097-09-2P 108097-10-5P 108097-11-6P  
108097-12-7P 108097-13-8P 108097-14-9P 108097-15-0P  
108097-16-1P 108097-17-2P 108097-18-3P 108097-19-4P  
108097-20-7P 108097-21-8P 108097-22-9P 108097-23-0P  
108097-24-1P 108097-25-2P 108097-26-3P 108097-27-4P  
108097-28-5P 108097-29-6P 108097-30-9P 108097-31-0P  
108097-32-1P 108097-33-2P 108097-34-3P 108097-35-4P  
108097-36-5P 108097-37-6P 108118-29-2P  
RL: BAC (Biological activity or effector, except adverse); SPN  
(Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(prepn. and antibacterial activity of, structure in relation to)

L9 ANSWER 56 OF 106 CA COPYRIGHT 1998 ACS  
AN 106:119189 CA  
IT 77738-20-6P 98506-66-2P 98506-67-3P 98514-81-9P 103633-30-3P  
106419-73-2P 106419-74-3P **106419-75-4P** 106419-76-5P  
106419-77-6P 106419-78-7P 106419-79-8P 106419-80-1P  
106419-81-2P 106419-82-3P 106419-83-4P 106419-84-5P  
106419-85-6P 106419-86-7P 106419-87-8P 106419-88-9P  
106419-89-0P 106419-90-3P 106419-91-4P 106419-92-5P  
106419-93-6P 106419-94-7P 106419-95-8P 106419-96-9P  
106419-97-0P 106420-00-2P 106420-01-3P 106420-02-4P  
106420-03-5P 106434-36-0P 106434-37-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and conversion of, to chromogenic crown ether)

L9 ANSWER 57 OF 106 CA COPYRIGHT 1998 ACS

AN 106:84121 CA  
IT **105372-24-5P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and hydrolysis of)

L9 ANSWER 58 OF 106 CA COPYRIGHT 1998 ACS  
AN 106:32509 CA  
IT **73120-65-7P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and sapon. of)

L9 ANSWER 59 OF 106 CA COPYRIGHT 1998 ACS  
AN 105:208909 CA  
IT **85301-63-9P** 85301-64-0P 85308-20-9P 85308-21-0P  
85308-22-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and cyclocondensation of, with guanidine)

L9 ANSWER 60 OF 106 CA COPYRIGHT 1998 ACS  
AN 105:132945 CA  
IT **104390-75-2P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and redn. of)

L9 ANSWER 61 OF 106 CA COPYRIGHT 1998 ACS  
AN 105:93463 CA  
IT 108-59-8D, dialkylated 2917-78-4 **5846-22-0**  
**21118-89-8** **95929-64-9** 98061-06-4  
RL: RCT (Reactant)  
(reaction of, with carboxylesterase of liver, enantioselectivity  
in, DMSO effect on)

L9 ANSWER 62 OF 106 CA COPYRIGHT 1998 ACS  
AN 104:17316 CA  
IT **5846-22-0P** **21118-89-8P** **95929-64-9P**  
RL: PREP (Preparation)  
(prepn. and hydrolysis by chymotrypsin plus esterase)

L9 ANSWER 63 OF 106 CA COPYRIGHT 1998 ACS  
AN 103:123192 CA  
IT 15326-95-1P 15326-96-2P 15374-23-9P 42361-33-1P  
**98190-97-7P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and decarboxylation of)

L9 ANSWER 64 OF 106 CA COPYRIGHT 1998 ACS  
AN 103:122638 CA  
IT 2049-70-9 2917-78-4 55114-29-9 **55114-30-2** 55898-43-6  
65896-61-9 88253-94-5 98061-04-2 98061-05-3 98061-06-4  
98061-07-5 98061-08-6  
RL: RCT (Reactant)  
(enzyme-catalyzed hydrolysis of)  
IT **95929-64-9P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and enzyme-catalyzed hydrolysis of)

L9 ANSWER 65 OF 106 CA COPYRIGHT 1998 ACS  
AN 102:166308 CA  
IT 95929-63-8P **95929-64-9P** 95929-65-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, by methoxycarbonylation-methylation of ester)

L9 ANSWER 66 OF 106 CA COPYRIGHT 1998 ACS  
AN 100:121376 CA  
IT **52528-74-2P** **52528-76-4P** **52528-77-5P**  
89042-94-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as intermediate for pterysin-E)

L9 ANSWER 67 OF 106 CA COPYRIGHT 1998 ACS



AN 99:211872 CA  
IT **87482-89-1**  
RL: RCT (Reactant)  
(sapon. of)

L9 ANSWER 68 OF 106 CA COPYRIGHT 1998 ACS  
AN 99:4853 CA  
IT 38896-01-4P 86096-96-0P **86096-97-1P** 86096-98-2P  
86097-00-9P 86097-01-0P 86097-02-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 69 OF 106 CA COPYRIGHT 1998 ACS  
AN 98:160669 CA  
IT **85301-63-9P** 85301-64-0P 85308-20-9P 85308-21-0P  
85308-22-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and cyclocondensation with guanidine)

L9 ANSWER 70 OF 106 CA COPYRIGHT 1998 ACS  
AN 98:98679 CA  
IT **55114-30-2P**  
RL: FORM (Formation, nonpreparative); PREP (Preparation)  
(formation of, in photolysis of [bis(ethoxycarbonyl)propyl]cobaloxime)

L9 ANSWER 71 OF 106 CA COPYRIGHT 1998 ACS  
AN 98:13857 CA  
IT **53979-20-7**  
RL: RCT (Reactant)  
(hydrolysis of, asym., with pig liver esterase, methyl dopa synthesis in relation to)

L9 ANSWER 72 OF 106 CA COPYRIGHT 1998 ACS  
AN 96:217479 CA  
IT **80790-79-0P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and sapon. of)

L9 ANSWER 73 OF 106 CA COPYRIGHT 1998 ACS  
AN 96:85262 CA  
IT **80790-79-0**  
RL: PROC (Process)  
(conversion of, to (chlorohydroxyphenyl)methylpropanoate ester)

L9 ANSWER 74 OF 106 CA COPYRIGHT 1998 ACS  
AN 95:6875 CA  
IT **61227-49-4P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and sapon. of)

L9 ANSWER 75 OF 106 CA COPYRIGHT 1998 ACS  
AN 94:29723 CA  
IT 580-35-8P 6125-24-2P 34405-43-1P **76154-00-2P**  
**76154-01-3P 76154-02-4P 76154-03-5P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 76 OF 106 CA COPYRIGHT 1998 ACS  
AN 93:95235 CA  
IT **55114-30-2P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and cyclocondensation of, with urea)

L9 ANSWER 77 OF 106 CA COPYRIGHT 1998 ACS  
AN 92:215009 CA  
IT 607-81-8P 609-08-5P 619-68-1P 831-91-4P 6731-58-4P  
**55114-30-2P** 73062-47-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 78 OF 106 CA COPYRIGHT 1998 ACS  
 AN 92:146387 CA  
 IT 6619-58-5P 37765-73-4P 70146-77-9P **70146-83-7P**  
**73120-66-8P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and hydrolysis of)  
 IT **73120-65-7P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

L9 ANSWER 79 OF 106 CA COPYRIGHT 1998 ACS  
 AN 90:179912 CA  
 IT **70146-83-7P 70146-84-8P 70146-85-9P**  
**70146-86-0P 70146-87-1P 70146-88-2P**  
**70146-89-3P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and decarboxylation of)

L9 ANSWER 80 OF 106 CA COPYRIGHT 1998 ACS  
 AN 88:152456 CA  
 IT **66192-10-7P** 66192-11-8P **66192-12-9P**  
**66192-13-0P** 66192-14-1P 66192-15-2P **66192-16-3P**  
 66192-17-4P 66192-18-5P **66192-19-6P 66192-20-9P**  
 66192-21-0P 66192-22-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and decarboxylation of)

L9 ANSWER 81 OF 106 CA COPYRIGHT 1998 ACS  
 AN 87:135246 CA  
 IT **34928-28-4 34928-31-9 34928-35-3**  
**53979-21-8** 53979-23-0 53979-25-2 **55114-30-2**  
 57737-37-8 **57737-40-3** 57737-41-4  
 RL: RCT (Reactant)  
 (cyclocondensation of, with benzoylurea)

L9 ANSWER 82 OF 106 CA COPYRIGHT 1998 ACS  
 AN 87:68521 CA  
 IT **16123-38-9P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and sapon. of)

L9 ANSWER 83 OF 106 CA COPYRIGHT 1998 ACS  
 AN 86:16505 CA  
 IT 16123-39-0P **61227-49-4P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and decarboxylation of)  
 IT **16123-38-9P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and sapon. of)

L9 ANSWER 84 OF 106 CA COPYRIGHT 1998 ACS  
 AN 85:159759 CA  
 IT 60726-40-1 **60726-42-3**  
 RL: RCT (Reactant)  
 (hydrolysis and decarboxylation of)

L9 ANSWER 85 OF 106 CA COPYRIGHT 1998 ACS  
 AN 85:123658 CA  
 IT **60423-90-7P** 60424-11-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and hydrolysis of)

L9 ANSWER 86 OF 106 CA COPYRIGHT 1998 ACS  
 AN 84:30997 CA  
 IT **57737-33-4 57737-34-5 57737-35-6**  
 57737-36-7 57737-37-8 **57737-38-9 57737-39-0**  
**57737-40-3** 57737-41-4 **57749-46-9**  
**57749-47-0** 57827-47-1  
 RL: RCT (Reactant)

(reaction of, with urea and phenylurea)

L9 ANSWER 87 OF 106 CA COPYRIGHT 1998 ACS  
AN 83:205954 CA  
IT 57373-96-3P **57373-97-4P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and decarboxylation of)

L9 ANSWER 88 OF 106 CA COPYRIGHT 1998 ACS  
AN 82:125326 CA  
IT 83-13-6 133-13-1 596-75-8 607-81-8 1619-62-1 2163-44-2  
2163-48-6 6065-59-4 34009-61-5 55114-29-9 **55114-30-2**  
RL: RCT (Reactant)  
(condensation of, with hydrazino-1-methyl-3-phenyl-1H-1,2,4-  
triazole)

L9 ANSWER 89 OF 106 CA COPYRIGHT 1998 ACS  
AN 82:58420 CA  
IT **53413-48-2P** 53413-49-3P 53413-50-6P **53413-51-7P**  
53413-52-8P 53413-54-0P **53417-22-4P** 53417-23-5P  
53417-25-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 90 OF 106 CA COPYRIGHT 1998 ACS  
AN 82:57721 CA  
IT 7402-30-4 **50846-71-4 50846-72-5** 50846-73-6  
50846-74-7 50846-75-8 50846-76-9 **51031-83-5**  
52478-15-6  
RL: RCT (Reactant)  
(cyclization of, with urea)

L9 ANSWER 91 OF 106 CA COPYRIGHT 1998 ACS  
AN 81:152082 CA  
IT 53979-19-4P **53979-20-7P 53979-21-8P**  
**53979-22-9P** 53979-23-0P 53979-24-1P 53979-25-2P  
**53979-26-3P 53979-27-4P 53979-28-5P**  
53979-29-6P 53979-30-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and hydrolysis-decarboxylation of)

L9 ANSWER 92 OF 106 CA COPYRIGHT 1998 ACS  
AN 80:145877 CA  
IT 6619-57-4P **52086-50-7P** 52086-51-8P 52086-52-9P  
52086-53-0P 52086-54-1P 52086-55-2P 52086-56-3P 52086-57-4P  
52086-58-5P 52086-59-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 93 OF 106 CA COPYRIGHT 1998 ACS  
AN 80:121128 CA  
IT **52528-74-2P** 52528-75-3P **52528-76-4P**  
**52528-77-5P** 52528-78-6P 52528-79-7P **52528-80-0P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 94 OF 106 CA COPYRIGHT 1998 ACS  
AN 80:108570 CA  
IT 7402-30-4 **50846-71-4 50846-72-5** 50846-73-6  
50846-74-7 50846-75-8 50846-76-9 **51031-83-5**  
52478-15-6  
RL: RCT (Reactant)  
(cyclization of, with urea)

L9 ANSWER 95 OF 106 CA COPYRIGHT 1998 ACS  
AN 80:14957 CA  
IT 7402-30-4 **50846-71-4 50846-72-5** 50846-73-6  
50846-74-7 50846-75-8 50846-76-9 **51031-83-5**  
51031-84-6  
RL: RCT (Reactant)

(reaction of, with urea)

L9 ANSWER 96 OF 106 CA COPYRIGHT 1998 ACS  
AN 76:34193 CA  
IT **34928-23-9P 34928-24-0P 34928-25-1P**  
34928-26-2P **34928-27-3P 34928-28-4P**  
**34928-29-5P** 34928-30-8P **34928-31-9P**  
**34928-32-0P** 34928-33-1P **34928-34-2P**  
**34928-35-3P** 34928-36-4P 34928-37-5P 34928-38-6P  
34928-39-7P 34928-40-0P 34928-41-1P 34928-42-2P 34928-43-3P  
34928-44-4P 34928-45-5P 34928-46-6P 34928-47-7P 34928-48-8P  
34928-49-9P 34928-50-2P 34928-51-3P **34939-47-4P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 97 OF 106 CA COPYRIGHT 1998 ACS  
AN 73:56809 CA  
IT 23578-06-5 26872-59-3 28499-98-1 29134-78-9 29134-79-0  
29134-80-3 **29134-81-4** 29134-82-5 **29134-83-6**  
29134-84-7 29134-86-9 29134-87-0 29260-09-1 29260-10-4  
29431-16-1  
RL: USES (Uses)  
(antioxidants, for plastics)

L9 ANSWER 98 OF 106 CA COPYRIGHT 1998 ACS  
AN 71:102006 CA  
IT **5075-55-8P** 5075-58-1P 5075-66-1P 5120-54-7P  
5120-57-0P 17875-53-5P 17945-43-6P 23858-68-6P 23858-75-5P  
23858-76-6P 23858-77-7P 23858-78-8P 23858-79-9P 23858-80-2P  
23858-81-3P 23858-82-4P 23858-83-5P 23858-84-6P 23858-85-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 99 OF 106 CA COPYRIGHT 1998 ACS  
AN 71:91132 CA  
IT 18595-14-7P 24078-21-5P 24078-23-7P 24078-24-8P 24078-25-9P  
24078-26-0P 24078-27-1P **24078-28-2P** 24078-29-3P  
24078-30-6P 24078-31-7P 24078-32-8P 24078-33-9P 24078-34-0P  
24106-09-0P 24106-10-3P 24231-93-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 100 OF 106 CA COPYRIGHT 1998 ACS  
AN 71:22328 CA  
IT 16817-48-4P 16855-15-5P 16882-23-8P **23354-66-7P**  
23364-97-8P 23365-24-4P 23365-25-5P 23365-26-6P 23365-27-7P  
23365-28-8P 23365-29-9P 23365-30-2P 23365-31-3P 23365-32-4P  
23365-33-5P 23365-34-6P 23365-35-7P 23413-10-7P 23413-11-8P  
23421-65-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 101 OF 106 CA COPYRIGHT 1998 ACS  
AN 70:87356 CA  
IT 4478-10-8P 4982-31-4P 5743-02-2P 22291-52-7P  
**22291-53-8P** 22291-54-9P 22291-55-0P 22291-56-1P  
22291-57-2P 22291-58-3P 22291-59-4P 22291-60-7P 22359-78-0P  
24876-54-8P 24876-55-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 102 OF 106 CA COPYRIGHT 1998 ACS  
AN 70:47872 CA  
IT 672-87-7P 824-94-2P **21118-89-8P** 21118-91-2P  
21186-54-9P 22620-02-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

L9 ANSWER 103 OF 106 CA COPYRIGHT 1998 ACS  
AN 68:79003 CA

IT 16545-53-2 19988-88-6 20297-75-0 20297-76-1 20297-77-2  
 20297-78-3 20297-79-4 20297-80-7 20297-82-9 20297-84-1  
 20297-85-2 20297-86-3 20297-87-4 20297-88-5 20297-89-6  
 20297-90-9 20297-91-0 20297-92-1 20297-93-2 20297-94-3  
**20297-95-4** 20370-18-7 20370-19-8 20370-20-1  
 20370-21-2

RL: USES (Uses)  
 (stabilizers (thermal), for propene polymers)

L9 ANSWER 104 OF 106 CA COPYRIGHT 1998 ACS

AN 68:29468 CA

IT 613-26-3P 782-23-0P 785-00-2P 2960-97-6P 3837-38-5P  
 14343-91-0P 15254-25-8P 17526-42-0P 17526-43-1P 17526-44-2P  
 17526-45-3P 17526-46-4P 17526-47-5P 17526-49-7P 17526-50-0P  
 17526-51-1P 17526-52-2P 17526-53-3P 17526-54-4P  
**17526-55-5P** 17526-56-6P 17526-57-7P 17538-44-2P  
 17538-45-3P 17538-46-4P 17538-48-6P 17538-49-7P 17538-50-0P  
 17538-51-1P 17538-52-2P 17538-53-3P 17538-54-4P 17538-55-5P  
 17538-56-6P 17538-57-7P 17538-58-8P 17538-59-9P 17538-61-3P  
 17538-63-5P 17748-92-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

L9 ANSWER 105 OF 106 CA COPYRIGHT 1998 ACS

AN 67:100331 CA

IT 2445-28-5P 16123-36-7P 16123-37-8P **16123-38-9P**  
 16123-39-0P 16123-40-3P 16123-41-4P 16123-42-5P 16123-43-6P  
 16123-44-7P 16123-45-8P 16123-46-9P 16123-47-0P 16123-48-1P  
 16123-49-2P 16123-50-5P 16123-51-6P 16123-52-7P 16123-53-8P  
 16123-54-9P 16123-55-0P 16123-56-1P 16123-57-2P 16123-58-3P  
 16123-59-4P 16123-60-7P 16123-61-8P 16123-62-9P 16123-63-0P  
 16136-96-2P 16136-97-3P 16136-98-4P 16136-99-5P 16137-00-1P  
 16137-01-2P 16137-02-3P 16137-03-4P 16137-04-5P 16137-05-6P  
 16137-06-7P 16137-07-8P 16137-08-9P 16137-09-0P 16137-10-3P  
 16137-11-4P 16137-12-5P 16137-14-7P 16137-15-8P 16137-16-9P  
 16137-17-0P 16137-18-1P 16137-19-2P 16137-20-5P 16137-21-6P  
 16137-22-7P 16137-23-8P 16137-24-9P 16137-25-0P 16137-26-1P  
 16259-09-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

L9 ANSWER 106 OF 106 CA COPYRIGHT 1998 ACS

AN 66:10834 CA

IT 13604-75-6P 13604-76-7P 13604-77-8P 13604-78-9P 13605-71-5P  
 13605-72-6P 13605-73-7P 13605-74-8P 13605-75-9P 13605-76-0P  
 13605-77-1P 13605-79-3P 13605-80-6P 13605-81-7P 13605-83-9P  
 13608-07-6P 13608-08-7P 13608-09-8P 13695-05-1P 14061-67-7P  
**14553-89-0P 14553-90-3P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

=> d 30-31 all

L11 HAS NO ANSWERS

'ALL ' IS NOT A VALID STRUCTURE FORMAT KEYWORD

Structure Formats

SIA ----- Structure Image, Attributes, and map table if it contains  
 data. (Default)

SIM ----- Structure Image.

SAT ----- Structure ATtributes and map table if it contains data.

SCT ----- Structure Connection Table and map table if it contains  
 data.

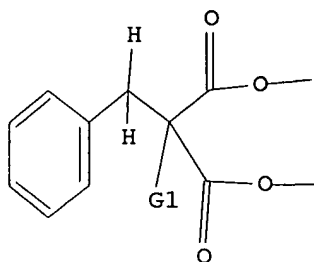
SDA ----- All Structure DATA (image, attributes, connection table and  
 map table if it contains data).

NOS ----- NO Structure data.

ENTER STRUCTURE FORMAT (SIA), SCT, SDA, SIM, SAT, NOS:.

L2

STR



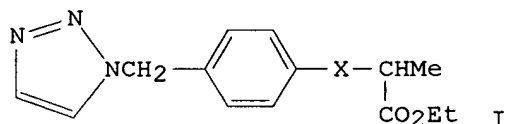
G1 Me,Et,n-Pr

Structure attributes must be viewed using STN Express query preparation.

L5 SCR 1839  
 L8 128 SEA FILE=REGISTRY SSS FUL L2 NOT L5  
 L9 106 SEA FILE=CA L8  
 L10 1713 SEA FILE=CA ARYLPROPANOL? OR BENZENEPROPANOL? OR PHENYLPROPANOL?  
 L11 0 SEA FILE=CA L9 AND L10

=> d 19 30-31 all

L9 ANSWER 30 OF 106 CA COPYRIGHT 1998 ACS  
 AN 117:7850 CA  
 TI An 1,2,3-triazole derivative bioisoster of a potent in vitro prostaglandin synthesis inhibitor: preparation and biological activity  
 AU Biagi, Giuliana; Dell'omodarme, Giuliana; Giorgi, Irene; Livi, Oreste; Scartoni, Valerio  
 CS Ist. Chim. Farm. Tossicol., Univ. Pisa, Pisa, 56100, Italy  
 SO Farmaco (1992), 47(1), 91-8  
 CODEN: FRMCE8  
 DT Journal  
 LA English  
 CC 28-9 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 2  
 GI



AB The prepn. of the triazole ester I (X = CH2), a methylenic bioisoster of an oxygenated compd. I (X = O), effective inhibitor of the prostaglandin synthesis in vitro is reported. Biol. evaluation of I (X = CH2) and of the corresponding acid shows that the compds. maintain a good enzymic inhibitory activity compared with indomethacin and aspirin.  
 ST ethoxycarbonylpropylbenzylimidazole prepn prostaglandin synthesis inhibitor; antiinflammatory ethoxycarbonylpropylbenzylimidazole; prostaglandin synthesis inhibitor bioisoster triazole  
 IT Inflammation inhibitors  
 (ethoxycarbonylpropylbenzylimidazoles)  
 IT Prostaglandins  
 RL: RCT (Reactant)  
 (inhibition of synthesis of, by ethoxycarbonylpropylbenzylimidazoles)  
 IT 100-14-1, p-Nitrobenzyl chloride  
 RL: RCT (Reactant)  
 (alkylation by, of di-Et methylmalonate)

IT 609-08-5, Diethyl methylmalonate  
 RL: RCT (Reactant)  
 (nitrobenzylation of)

IT **141352-95-6P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and acid hydrolysis-decarboxylation of)

IT 141352-97-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and acidation of)

IT 141353-00-6P  
 RL: BAC (Biological activity or effector, except adverse); SPN  
 (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (prepn. and antiinflammatory activity of)

IT 52787-39-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and borohydride redn. of)

IT 141352-98-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and cyclization of, with vinyl acetate, triazole deriv.)

IT 141352-96-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and esterification of, with hydrochloric acid)

IT 60423-91-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and formylation of)

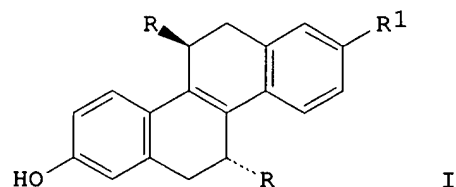
IT 66735-03-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and redn. of)

IT 103096-03-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and sequential diazotization and cyanation of)

IT 141353-01-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

IT 141352-99-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn., esterification with ethanol and antiinflammatory  
 activity of)

L9 ANSWER 31 OF 106 CA COPYRIGHT 1998 ACS  
 AN 116:83341 CA  
 TI 5,6,11,12-Tetrahydrochrysenes: synthesis of rigid stilbene systems  
 designed to be fluorescent ligands for the estrogen receptor  
 AU Hwang, Kwang Jin; O'Neil, James P.; Katzenellenbogen, John A.  
 CS Dep. Chem., Univ. Illinois, Urbana, IL, 61801, USA  
 SO J. Org. Chem. (1992), 57(4), 1262-71  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DT Journal  
 LA English  
 CC 25-28 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)  
 Section cross-reference(s): 9, 32  
 OS CJACS-IMAGE; CJACS  
 GI



AB A series of tetrahydrochrysenes, e.g. I (R = H, Me, Et, Pr, R1 = OH; R = Et, R1 = Ac, CO<sub>2</sub>Me, CN, CONH<sub>2</sub>, NO<sub>2</sub>), were prepd. as fluorescent ligands for the estrogen receptor. The stilbene chromophore in this tetracyclic system is held rigid and contains an electron-donating hydroxyl group at C-8, which corresponds to the phenolic hydroxyl of

estrogens, and an electron acceptor at C-2 to give a donor-acceptor fluorophore. Addnl. substituents at C-5 and C-11 provide addnl. bulk that improves receptor binding affinity without distorting the planar conjugated system. The tetrahydrochrysene core was prepd. by an acyloin condensation of .alpha.-alkyl m-methoxyhydrocinnamate esters, followed by a double dehydrative cyclization. The cis and trans isomers of the alkyl substituted systems could be sepd. and their stereochem. confirmed by x-ray crystallog. anal.; the trans isomer has the higher receptor binding affinity, and the deriv. with Et substituents at C-5 and C-11 has the best affinity. The donor-acceptor systems were prepd. by functional group manipulations on one of the arom. methoxy groups: conversion to the trifluoromethanesulfonate was followed by a palladium-mediated Me carbonylation to give the acetyl deriv. and methoxycarbonylation to give the ester. The ester was further converted to the amide and nitrile. The nitro compd. was prepd. by nitration of a protio system, itself prepd. by hydrogenolysis of the trifluoromethanesulfonate. These tetrahydrochrysenes provide a favorable combination of estrogen receptor binding affinity and long wavelength, high quantum yield fluorescence which makes them useful as fluorescent ligands for the estrogen receptor.

- ST tetrahydrochrysene fluorescent ligand estrogen receptor; stilbene chromophore tetrahydrochrysene; conformation tetrahydrochrysene estrogen receptor
- IT Fluorescence  
(of tetrahydrochrysene ligands for the estrogen receptor)
- IT Chromophores and Chromophoric systems  
(stilbene, in tetrahydrochrysene ligands for the estrogen receptor)
- IT Condensation reaction  
(acyloin, in prepn. of fluorescent tetrahydrochrysene ligands for the estrogen receptor)
- IT Receptors  
RL: RCT (Reactant)  
(estrogen, fluorescent tetrahydrochrysene ligands)
- IT Estrogens  
RL: RCT (Reactant)  
(receptors, fluorescent tetrahydrochrysene ligands)
- IT 133-13-1, Diethyl ethylmalonate 2163-48-6, Diethyl propylmalonate  
RL: RCT (Reactant)  
(condensation of, with (chloromethyl)anisole)
- IT 824-98-6, m-(Chloromethyl)anisole  
RL: RCT (Reactant)  
(condensation of, with di-Et ethyl- and propylmalonates)
- IT 138090-26-3  
RL: RCT (Reactant)  
(dimerization of)
- IT 6099-04-3, m-Methoxycinnamic acid  
RL: RCT (Reactant)  
(hydrogenation of)
- IT 138090-09-2P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and carbonylation of)
- IT 138090-00-3P 138090-01-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and cyclization by polyphosphoric acid)
- IT 71505-81-2P 138089-97-1P 138089-98-2P 138089-99-3P 138090-07-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and cyclization by toluenesulfonic acid)
- IT **138089-93-7P 138089-94-8P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and decarboxylation of)
- IT 18930-99-9P 138090-02-5P 138090-03-6P 138090-04-7P 138090-05-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and demethylation by boron tribromide)
- IT 138090-12-7P 138090-15-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and demethylation of)



IT 138090-10-5P 138128-48-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and detriflation of)

IT 10516-71-9P, 3-(m-Methoxyphenyl)propionic acid  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and esterification of)

IT 138090-16-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and nitration of)

IT 62007-42-5P 138089-95-9P 138089-96-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and silylation of)

IT 138090-08-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and triflation of)

IT 138090-06-9P 138090-11-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

IT 138090-17-2P 138090-18-3P 138090-19-4P 138090-20-7P  
 138090-21-8P 138090-22-9P 138090-23-0P 138090-24-1P  
 138090-25-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as fluorescent ligand for the estrogen receptor)

IT 138090-13-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn., demethylation, and amidation of)

IT 138090-14-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn., demethylation, and dehydration of)

IT 50704-52-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn., silylation, and methylation of)

=> d 19 37 all

L9 ANSWER 37 OF 106 CA COPYRIGHT 1998 ACS  
 AN 115:114819 CA  
 TI Synthesis of racemic (S)-(+)- or (R)-(-)-[methyl-11C]amphetamine  
 AU Gee, Antony; Laangstroem, Bengt  
 CS Inst. Chem., Univ. Uppsala, Uppsala, 751 21, Swed.  
 SO Acta Chem. Scand. (1991), 45(4), 431-5  
 CODEN: ACHSE7; ISSN: 0904-213X  
 DT Journal  
 LA English  
 CC 31-2 (Alkaloids)  
 AB (.-)-[methyl-11C]amphetamine (I) was prepd. by alkylation of  
 PhCH2CH(CO2Me)2 with 11CH3I to give di-Me 2-benzyl-2-  
 ([11C]methyl)malonate which was hydrolyzed with NaOH and  
 decarboxylated to produce 2-benzyl-[3-11C]propionic acid (II).  
 Conversion of II into I was achieved via the Schmidt reaction.  
 Enantiomerically pure I were obtained by the preparative LC sepn. of  
 the (+)- or (-)-10-camphorsulfonamide derivs. of (.-)-I with a  
 total decay-cor. radiochem. yield of 7%. The position of labeling  
 was confirmed by a 13C synthesis using the same reaction pathway,  
 and anal. by 13C NMR spectroscopy.

ST amphetamine carbon labeled

IT 135154-83-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and Schmidt reaction of)

IT 135154-84-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and resoln. of)

IT 135154-85-7P 135268-27-8P 135268-28-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

IT 132629-17-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn., hydrolysis, and decarboxylation of)

IT 4227-95-6, Methyl-13C iodide 54245-42-0, Methyl-11C iodide

RL: RCT (Reactant)  
(reaction of, with benzylmalonate)  
IT 49769-78-0, Dimethyl 2-benzylmalonate  
RL: RCT (Reactant)  
(reaction of, with labeled Me iodide)

=> d 19 51 all

L9 ANSWER 51 OF 106 CA COPYRIGHT 1998 ACS  
AN 110:153913 CA  
TI Process for the production of (.mu.)-2-(3-aminobenzyl)butyric acid,  
an intermediate for the contrast agent iopanoic acid  
IN Palecek, Jaroslav; Pis, Jaroslav; Londyn, Miroslav; Borovicka,  
Milos; Lukac, Juraj; Dedek, Vaclav; Mostecky, Jiri  
PA Czech.  
SO Czech., 5 pp.  
CODEN: CZXXA9  
PI CS 246794 B1 871215  
AI CS 85-2883 850419  
DT Patent  
LA Czech  
IC ICM C07C101-447  
CC 25-17 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)  
Section cross-reference(s): 8  
AB (.+-.)-3-H2NC6H4CH2CHEtCO2H (I), a key intermediate for the radiog.  
contrast medium iopanoic acid, is prepd. from 3-O2NC6H4CHO or  
3-O2NC6H4CO2R (II; R = Me, Et) in 5 steps. Redn. of II (R = Me) by  
NaAlH2(OCH2CH2OMe)2 in PhMe at 5-10.degree. gave 87.4%  
3-O2NC6H4CH2OH, which (33.5 g) was refluxed with azeotropic-concn.  
HBr for 3 h to give 32 g 3-O2NC6H4CH2Br (III). EtCH(CO2Et)2 (43.7  
g) was refluxed with 5.34 g powd. Na in PhMe, and the resultant Na  
salt was treated with 50 g III and the mixt. refluxed for 5 h to  
give 57.2 g 3-O2NC6H4CH2CET(CO2Et)2. This (15 g) was hydrogenated  
over PtO2 in EtOH to give 12.6 g corresponding amino diester, which  
(9.6 g) was sapon. by KOH in refluxing aq. EtOH and decarboxylated  
by HCl in the same soln. to give 3.92 g I after recrystn. from  
C6H6-heptane.  
ST aminobenzylbutyrate prepn intermediate iopanoic acid; radiog  
contrast medium intermediate prepn  
IT 133-13-1, Diethyl ethylmalonate 18995-13-6, Diethyl ethylmalonate  
sodium salt 112303-24-9, Dimethyl ethylmalonate sodium salt  
RL: RCT (Reactant)  
(condensation of, with nitrobenzyl halides)  
IT 99-61-6, 3-Nitrobenzaldehyde 618-95-1, Methyl 3-nitrobenzoate  
618-98-4, Ethyl 3-nitrobenzoate  
RL: RCT (Reactant)  
(hydride redn. of)  
IT 96-83-3, Iopanoic acid  
RL: RCT (Reactant)  
(intermediate for, prepn. of (aminobenzyl)butyryic acid as)  
IT 619-23-8P, 3-Nitrobenzyl chloride 3958-56-3P, 3-Nitrobenzyl iodide  
3958-57-4P, 3-Nitrobenzyl bromide  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and condensation of, with dialkyl ethylmalonate)  
IT 619-25-0P, 3-Nitrobenzyl alcohol  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and conversion of, to halides)  
IT **118688-44-1P 118688-45-2P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and hydrogenation of)  
IT **118688-46-3P 118688-47-4P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and sapon.-decarboxylation of)  
IT 118688-42-9P, (.+-.)-2(3-Aminobenzyl)butyric acid  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, from nitrobenzaldehyde or nitrobenzoate, as iopanoic  
acid intermediate)

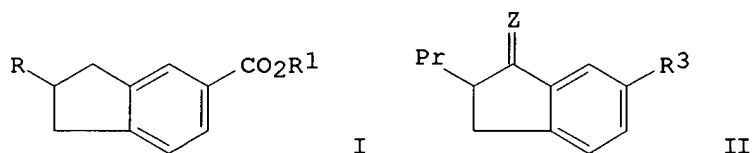
=> d 19 52 all

L9 ANSWER 52 OF 106 CA COPYRIGHT 1998 ACS  
 AN 110:82286 CA  
 TI Preparation of methylphenylalkanal and -alkanol derivatives as  
 perfume constituents  
 IN Hafner, Walter; Gebauer, Helmut; Regiert, Marlies; Friedrich,  
 Wilhelm; Markl, Erich  
 PA Consortium fuer Elektrochemische Industrie G.m.b.H., Fed. Rep. Ger.  
 SO Ger. Offen., 6 pp.  
 CODEN: GWXXBX  
 PI DE 3703584 A1 880818  
 AI DE 87-3703584 870206  
 DT Patent  
 LA German  
 IC ICM C07C033-20  
 ICS C07C047-228; A61K007-46; C11D003-50  
 ICA A61K007-50; C08K005-05; C08K005-07  
 CC 62-5 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 25  
 AB 2-Methyl-3-(3-methylphenyl)propanal (I), 2-methyl-3-(3,5-  
 dimethylphenyl)propanal, 2-methyl-3-(3-methylphenyl)-1-propanol  
 (II), 2-methyl-3-(3,5-dimethylphenyl)-1-propanol,  
 1-(3-methylphenyl)-2-methyl-3-butanol, and 1-(3,5-dimethylphenyl)-2-  
 methyl-3-butanol are prepd. as perfume constituents.  
 3-Methylbenzaldehyde (123 g) was condensed with 62 g EtCHO in 7.5 g  
 KOH-contg. 240 mL EtOH to give 2-(3-methylbenzylidene)propionaldehyd  
 e, which was hydrogenated over Pd/activated charcoal in cyclohexane  
 to give I and II.  
 ST alkanal methylphenyl prepn perfume constituent; perfume  
 methylphenylalkanal methylphenylalkanol prepn; alkanol methylphenyl  
 prepn perfume constituent  
 IT Perfumes and Essences  
 (phenylalkanal and phenylalkanol for, prepn. of)  
 IT 620-19-9, 3-Methylbenzyl chloride 2745-54-2, 3,5-Dimethylbenzyl  
 chloride  
 RL: RCT (Reactant)  
 (Grignard reaction of, with chloroacetone)  
 IT 78-95-5  
 RL: RCT (Reactant)  
 (Grignard reaction of, with dimethylbenzyl chloride)  
 IT 5779-95-3, 3,5-Dimethylbenzaldehyde  
 RL: RCT (Reactant)  
 (Reformatskii reaction of, with Me bromopropionate)  
 IT 5445-17-0, Methyl 2-bromopropionate  
 RL: RCT (Reactant)  
 (Reformatskii reaction of, with benzaldehyde derivs.)  
 IT 123-38-6, Propionaldehyde, reactions  
 RL: RCT (Reactant)  
 (condensation of, with methylbenzaldehyde)  
 IT 620-23-5, 3-Methylbenzaldehyde  
 RL: BIOL (Biological study)  
 (condensation of, with propionaldehyde)  
 IT 119052-85-6  
 RL: RCT (Reactant)  
 (cyclization of, epoxide from)  
 IT **94430-87-2P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and decarboxylation of)  
 IT 119052-89-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and hydride redn. of)  
 IT 119052-82-3P 119052-86-7P 119052-91-4P  
 RL: PREP (Preparation); RCT (Reactant)  
 (prepn. and redn. of)  
 IT 119052-83-4P 119052-84-5P 119052-87-8P 119052-88-9P  
 119052-90-3P 119052-92-5P  
 RL: PREP (Preparation)  
 (prepn. of, as perfume constituent)  
 IT 620-19-9, 3-Methylbenzyl chloride

RL: RCT (Reactant)  
 (reaction of, with di-Et methylmalonate)  
 IT 78-93-3, Methyl ethyl ketone, reactions 609-08-5, Diethyl  
 methylmalonate  
 RL: RCT (Reactant)  
 (reaction of, with methylbenzyl chloride)

=> d 19 63 all

L9 ANSWER 63 OF 106 CA COPYRIGHT 1998 ACS  
 AN 103:123192 CA  
 TI 2-Alkylindan-5-carboxylic acid derivatives as liquid crystals  
 PA Kanto Chemical Co., Inc., Japan  
 SO Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 PI JP 60069055 A2 850419 Showa  
 AI JP 83-176986 830927  
 DT Patent  
 LA Japanese  
 IC ICM C07C063-49  
 ICS C07C069-773; C07C121-52; C09K019-32  
 CC 25-23 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)  
 Section cross-reference(s): 75  
 GI



AB Title derivs. I (R = C1-10 alkyl; R1 = H, C6H4R2; R2 = cyano, C1-10 alkyl, alkoxy), useful in nematic liq. crystal display devices, are prepd. Thus, PhCH2CHPrCO2H (prepd. from di-Et malonate, PrBr, and PhCH2Cl) was heated in the presence of polyphosphoric acid to give 94.3% II (Z = O; R3 = H) (III). Clemmensen redn. of III gave 82.5% II (R3 = H, Z = H2) which was acetylated with AcCl to give 93.6% II (R3 = COMe; Z = H2) and oxidized by NaOCl to g give 70.3% I (R = Pr, R1 = H). The latter compd. was chlorinated and treated with 2.8 g 4-EtOC6H4OH to give 2.3 g I (R = Pr; R1 = C6H4OEt-4).

ST nematic liq crystal indancarboxylate prepn; phenylpropionic acid cyclization

IT Liquid crystals  
 (alkyl indancarboxylates)

IT 106-94-5  
 RL: RCT (Reactant)  
 (alkylation by, malonate)

IT 109-65-9 110-53-2 111-25-1 629-04-9  
 RL: RCT (Reactant)  
 (alkylation by, of malonate)

IT 105-53-3  
 RL: RCT (Reactant)  
 (alkylation of)

IT 622-62-8 645-56-7 767-00-0  
 RL: RCT (Reactant)  
 (esterification by, of indancarbonyl chloride)

IT 64624-93-7P 66324-75-2P 66325-07-3P 66325-36-8P 66359-02-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and acetylation of)

IT 133-08-4P 607-83-0P 2163-48-6P 5398-10-7P 6065-59-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and benzylation of)

IT 5668-19-9P 6008-22-6P 15327-02-3P 15327-07-8P 98191-23-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and cyclization of)

IT 15326-95-1P 15326-96-2P 15374-23-9P 42361-33-1P  
**98190-97-7P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and decarboxylation of)

IT 98191-01-6P 98191-02-7P 98191-03-8P 98191-04-9P 98191-24-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and oxidn. of)

IT 76937-26-3P 92013-10-0P 98190-98-8P 98190-99-9P 98191-00-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and redn. of)

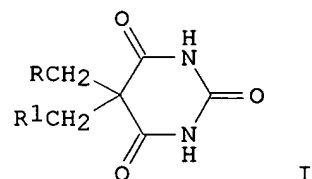
IT 98191-09-4P 98191-10-7P 98191-11-8P 98191-12-9P 98191-13-0P  
 98191-14-1P 98191-15-2P 98191-16-3P 98191-17-4P 98191-18-5P  
 98191-19-6P 98191-20-9P 98191-21-0P 98191-22-1P 98191-26-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

IT 98191-05-0P 98191-06-1P 98191-07-2P 98191-08-3P 98191-25-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn., chlorination, and esterification of)

IT 100-44-7, reactions  
 RL: RCT (Reactant)  
 (reaction of, with malonate)

=> d 19 76 all

L9 ANSWER 76 OF 106 CA COPYRIGHT 1998 ACS  
 AN 93:95235 CA  
 TI Flexible and rigid molecules - an anticonvulsant without sedative  
 properties  
 AU Qazi, T. U.; Askam, V.; Sewell, R. D.  
 CS Fac. Pharm., Univ. Al-Faateh, Tripoli, Libya  
 SO Libyan J. Sci. (1979), 9B, 79-84  
 CODEN: LBJSAP; ISSN: 0368-7481  
 DT Journal  
 LA English  
 CC 28-17 (Heterocyclic Compounds (More Than One Hetero Atom))  
 Section cross-reference(s): 1  
 GI



AB The barbiturates I (RR1 = o-C6H4; R = Ph, R1 = H) were prepd. from  
 RCH2(R1CH2)C(CO2Et)2 and urea. 2-Indanylcarbonylurea (II) was also  
 prepd. I and II were less active than phenobarbitone in the  
 antileptozol test. I (RR1 = o-C6H4) was less active than I (R = Ph,  
 R1 = H). The activity of I (RR1 = o-C6H4) was more persistent than  
 that of the others. I (RR1 = o-C6H4) and II had similar levels of  
 activity. I (R = Ph, R1 = H) was devoid of sedative activity at  
 anticonvulsant levels.

ST indanespirobarbituric acid prepn pharmacol; barbiturate benzylmethyl  
 prepn pharmacol; anticonvulsant benzylmethylbarbbbiturate; structure  
 activity anticonvulsant barbiturate

IT Anticonvulsants and Antiepileptics  
 (benzylmethylbarbiturate)

IT Molecular structure-biological activity relationship  
 (anticonvulsant, of barbiturate derivs.)

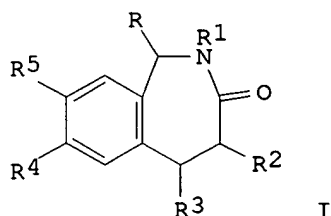
IT 609-08-5  
 RL: RCT (Reactant)  
 (benzylation of)

IT 50-01-1  
 RL: RCT (Reactant)

(cyclocondensation of, with indanedicarboxylate)  
 IT 57-13-6, reactions  
 RL: RCT (Reactant)  
 (cyclocondensation of, with malonate derivs.)  
 IT 74547-23-2P 74547-24-3P 74547-25-4P  
 RL: BAC (Biological activity or effector, except adverse); SPN  
 (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (prepn. and anticonvulsant activity of)  
 IT 55114-30-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and cyclocondensation of, with urea)  
 IT 66014-45-7  
 RL: RCT (Reactant)  
 (reaction of, with urea)

=> d 19 80 all

L9 ANSWER 80 OF 106 CA COPYRIGHT 1998 ACS  
 AN 88:152456 CA  
 TI Pharmaceutical 1,2,4,5-tetrahydro-3H-2-benzazepin-3-ones  
 IN Croisier, Paul; Rodriguez, Ludovic  
 PA UCB S. A., Belg.  
 SO Ger. Offen., 51 pp.  
 CODEN: GWXXBX  
 PI DE 2733868 780202  
 PRAI GB 76-31846 760730  
 DT Patent  
 LA German  
 IC C07D223-16  
 CC 27-22 (Heterocyclic Compounds (One Hetero Atom))  
 GI



AB The title compds. I [R = H, Ph; R1 = H, alkyl (optionally, substituted by OH, CN, alkoxy, H2NCO, NH2, tetrahydropyranyloxy, etc.) alkenyl, acyl; R2 = H, C1-4 alkyl; R3 = H, C1-4 alkyl, Ph; R4 = H, halogen, C1-4 alkoxy; R5 = H, halogen, C1-4 alkyl] were prepd. by several methods. Thus, 2,4-(NC)ClC6H3CH2CH2CHMeCO2Me was hydrogenated over Raney Ni in MeOH soln. to give 26% I (R = R1 = R3 = R4 = H, R2 = Me, R5 = Cl). I are useful for treatment of mental disorders and hypoxia; animal test results were tabulated.  
 ST psychotropic benzazepinone prepn; hypoxia benzazepinone  
 IT Psychotropics  
 (tetrahydrobenzazepinone)  
 IT 506-96-7 14077-58-8  
 RL: RCT (Reactant)  
 (acetylation by, of benzazepinone deriv.)  
 IT 74-88-4, reactions 75-03-6 78-77-3 106-95-6, reactions  
 107-14-2 107-30-2 109-54-6 110-53-2 627-42-9  
 RL: RCT (Reactant)  
 (alkylation by, of benzazepinone deriv.)  
 IT 57854-49-6  
 RL: RCT (Reactant)  
 (cyclocondensation of, with benzaldehyde)  
 IT 100-52-7, reactions  
 RL: RCT (Reactant)  
 (cyclocondensation of, with phenylpropionamide)  
 IT 7782-44-7, biological studies

RL: BIOL (Biological study)  
 (deficiency of, tetrahydrobenzazepinones in treatment of)

IT 5411-56-3  
 RL: RCT (Reactant)  
 (halogenation of)

IT 30525-89-4  
 RL: RCT (Reactant)  
 (hydroxymethylation by, of propionamide deriv.)

IT 7474-19-3  
 RL: RCT (Reactant)  
 (hydroxymethylation of)

IT 39220-74-1P 66191-74-0P 66191-75-1P 66191-76-2P 66191-77-3P  
 66191-78-4P 66191-79-5P 66191-80-8P 66191-81-9P 66191-82-0P  
 66191-83-1P 66191-84-2P 66192-26-5P 66192-30-1P 66219-16-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and cyclization of)

IT 66192-10-7P 66192-11-8P 66192-12-9P  
 66192-13-0P 66192-14-1P 66192-15-2P 66192-16-3P  
 66192-17-4P 66192-18-5P 66192-19-6P 66192-20-9P  
 66192-21-0P 66192-22-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and decarboxylation of)

IT 15115-58-9P 66191-98-8P 66191-99-9P 66192-00-5P 66192-01-6P  
 66192-02-7P 66192-03-8P 66192-04-9P 66192-05-0P 66192-06-1P  
 66192-07-2P 66192-08-3P 66192-09-4P 66192-29-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and esterification of)

IT 17724-38-8P 66191-62-6P 66191-63-7P 66191-64-8P 66191-65-9P  
 66191-66-0P 66191-67-1P 66191-68-2P 66191-69-3P 66191-70-6P  
 66191-71-7P 66191-72-8P 66191-73-9P 66192-27-6P 66192-31-2P  
 66192-32-3P 66192-33-4P 66192-34-5P 66192-35-6P 66192-36-7P  
 66192-37-8P 66192-38-9P 66192-39-0P 66192-40-3P 66192-41-4P  
 66192-42-5P 66192-43-6P 66192-44-7P 66192-45-8P 66192-46-9P  
 66192-47-0P 66192-48-1P 66192-49-2P 66192-50-5P 66192-51-6P  
 66192-52-7P 66192-53-8P 66192-54-9P 66192-55-0P 66192-56-1P  
 66192-57-2P 66192-58-3P 66192-59-4P 66192-60-7P 66192-61-8P  
 66192-62-9P 66192-63-0P 66192-64-1P 66192-65-2P 66192-66-3P  
 66192-67-4P 66192-68-5P 66192-69-6P 66192-70-9P 66192-71-0P  
 66192-72-1P 66192-73-2P 66192-74-3P 66192-75-4P 66192-76-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

IT 66191-85-3P 66191-86-4P 66191-87-5P 66191-88-6P 66191-89-7P  
 66191-90-0P 66191-91-1P 66191-92-2P 66191-93-3P 66191-94-4P  
 66191-95-5P 66191-96-6P 66191-97-7P 66192-28-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, and reaction with copper cyanide)

IT 3433-80-5P 62384-31-0P 66192-23-2P 66192-24-3P 66192-25-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, and reaction with malonate esters)

IT 96-34-4 107-13-1, reactions 17739-45-6  
 RL: RCT (Reactant)  
 (reaction of, with benzazepinone deriv.)

IT 544-92-3  
 RL: RCT (Reactant)  
 (reaction of, with bromophenylpropionate derivs.)

IT 609-08-5  
 RL: RCT (Reactant)  
 (reaction of, with halobenzyl halides)

=> d 9 91 all

L11 HAS NO ANSWERS

'ALL ' IS NOT A VALID STRUCTURE FORMAT KEYWORD

Structure Formats

SIA ----- Structure Image, Attributes, and map table if it contains  
 data. (Default)

SIM ----- Structure Image.

SAT ----- Structure ATtributes and map table if it contains data.

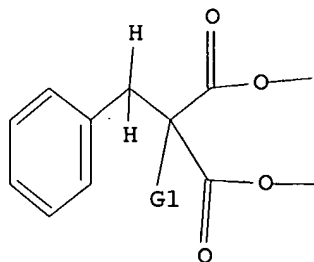
SCT ----- Structure Connection Table and map table if it contains  
 data.

SDA ----- All Structure Data (image, attributes, connection table and map table if it contains data).

NOS ----- NO Structure data.

ENTER STRUCTURE FORMAT (SIA), SCT, SDA, SIM, SAT, NOS:.

L2 STR



G1 Me,Et,n-Pr

Structure attributes must be viewed using STN Express query preparation.

L5 SCR 1839

L8 128 SEA FILE=REGISTRY SSS FUL L2 NOT L5

L9 106 SEA FILE=CA L8

L10 1713 SEA FILE=CA ARYLPROPANOL? OR BENZENEPROPANOL? OR PHENYLPROPANOL?

L11 0 SEA FILE=CA L9 AND L10

=> d 19 91 all

L9 ANSWER 91 OF 106 CA COPYRIGHT 1998 ACS

AN 81:152082 CA

TI Synthesis of biologically active compounds on the basis of substituted malonates

AU Adzhibekyan, A. S.; Ter-Zakharyan, Z.; Paronikyan, G. M.; Markaryan, E. A.

CS Inst. Tonkoi Org. Khim. im. Mndzhoyana, Erevan, USSR

SO Arm. Khim. Zh. (1974), 27(5), 434-40

CODEN: AYKZAN

DT Journal

LA Russian

CC 28-8 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 1

GI For diagram(s), see printed CA Issue.

AB PhNHCONH2 condensed with 4,3-R(MeO)C6H3CH2CR1(CO2Et)2 (R = MeO, EtO; R1 = H, Me, Et, Pr, Bu, allyl) in EtOH contg. NaOEt to give the corresponding barbiturates I. 3,4-R(MeO)C6H3-CH2CR1(CO2Et)2 (R = H, MeO; R1 = Me, Et, Pr, Bu, allyl) underwent successive hydrolysis-decarboxylation, treatment with SOCl2, and condensation with 6-amino-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid to give the penicillins II. The mutagenic activities of I and antibiotic activities of II were detd.

ST antibiotic penicillin; mutagen barbiturate; malonate phenylurea condensation; barbiturate benzylphenyl; penicillin phenylacetyl

IT Mutagens

(benzylbarbiturates as)

IT Penicillin, hydrocinnamoyl derivs.

RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)

(antibiotic activity of)

IT 105-53-3 133-08-4 609-08-5 2049-80-1 2163-48-6

RL: RCT (Reactant)

(condensation reaction of, with alkoxybenzyl chlorides)

IT 551-16-6

RL: RCT (Reactant)

(condensation reaction of, with hydrocinnamate derivs.)

IT 7306-46-9 53979-18-3

RL: RCT (Reactant)

(condensation reaction of, with malonate derivs.)



IT 53979-47-8P 53979-48-9P 53979-49-0P 53979-50-3P 53979-51-4P  
 53979-52-5P 53979-53-6P 53979-54-7P 53979-55-8P 53979-56-9P  
 RL: BAC (Biological activity or effector, except adverse); SPN  
 (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (prepn. and antibiotic activity of)

IT 53979-19-4P **53979-20-7P 53979-21-8P**  
**53979-22-9P** 53979-23-0P 53979-24-1P 53979-25-2P  
**53979-26-3P 53979-27-4P 53979-28-5P**  
 53979-29-6P 53979-30-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and hydrolysis-decarboxylation of)

IT 53979-37-6P 53979-38-7P 53979-39-8P 53979-40-1P 53979-41-2P  
 53979-42-3P 53979-43-4P 53979-44-5P 53979-45-6P 53979-46-7P  
 54021-37-3P 54021-38-4P  
 RL: BAC (Biological activity or effector, except adverse); SPN  
 (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (prepn. and mutagenic activity of)

IT 18622-70-3P 52427-11-9P 53979-31-0P 53979-32-1P 53979-33-2P  
 53979-34-3P 53979-35-4P 53979-36-5P 54021-35-1P 54021-36-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and reaction with penicillin deriv.)

=> d 19 87 all

L9 ANSWER 87 OF 106 CA COPYRIGHT 1998 ACS  
 AN 83:205954 CA  
 TI Acyl-substituted phenyl propionic acids  
 IN Houlihan, William J.; Nadelson, Jeffrey  
 PA Sandoz-Wander, Inc., USA  
 SO U.S., 6 pp.  
 CODEN: USXXAM  
 PI US 3907878 750923  
 AI US 73-333893 730220  
 DT Patent  
 LA English  
 IC C07C  
 NCL 260515000R  
 CC 25-17 (Noncondensed Aromatic Compounds)  
 AB 4-(Me3CCO)C6H4(CH2)2CO2H (I) was prepd. by refluxing  
 4-(Me3CCO)C6H4CH2CH(CO2Et)2 (II) with aq. KOH and EtOH. Methylation  
 of II with MeI followed by decarboxylation gave 4-  
 (Me3CCO)C6H4CH2CHMeCO2H (III). II was prepd. by the reaction of the  
 Grignard reagent from 4-MeC6H4Br with Me3CCOCl, followed by  
 bromination, to give 4-BrCH2C6H4COCMe3, which reacted with  
 H2C(CO2Et)2 and NaH in AcNMe2. I and III were useful as  
 hypolipidemic agents; animal tests were described.

ST hypolipidemic pivaloylphenylpropionate; phenylpropionate pivaloyl  
 IT Anticholesteremics  
 ((pivaloylphenyl)propionic acids)

IT Lipids  
 RL: RCT (Reactant)  
 (lowering of, in blood, by (pivaloylphenyl)propionic acids)

IT 3282-30-2  
 RL: RCT (Reactant)  
 (Grignard reaction of, with bromotoluene)

IT 106-38-7  
 RL: RCT (Reactant)  
 (Grignard reaction of, with pivaloyl chloride)

IT 74-88-4  
 RL: RCT (Reactant)  
 (alkylation by, of diethyl benzylmalonate)

IT 30314-44-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and bromination of)

IT 57373-96-3P **57373-97-4P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and decarboxylation of)

IT 57373-98-5P 57373-99-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)  
 IT 52449-32-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, and reaction with diethyl malonate)  
 IT 105-53-3  
 RL: RCT (Reactant)  
 (reaction of, with bromopivaloyltoluene)

=> d 19 83 all

L9 ANSWER 83 OF 106 CA COPYRIGHT 1998 ACS  
 AN 86:16505 CA  
 TI Synthesis of isocoumarins via indanones  
 AU Carter, Rachel H.; Colyer, Roger M.; Hill, Robert A.; Staunton, James  
 CS Univ. Chem. Lab., Univ. Cambridge, Cambridge, Engl.  
 SO J. Chem. Soc., Perkin Trans. 1 (1976), (13), 1438-41  
 CODEN: JCPRB4  
 DT Journal  
 LA English  
 CC 27-14 (Heterocyclic Compounds (One Hetero Atom))  
 Section cross-reference(s): 26  
 GI For diagram(s), see printed CA Issue.  
 AB Reaction of 5,3-R(MeO)C6H3CHO (R = MeO, H) with di-Et malonate gave 5,3-R(MeO)C6H3CH:C(CO2Et)2 which on sequential hydrogenation, methylation, sapon., and decarboxylation gave 5,3-R(MeO)C6H3CH2CHMeCO2H. Acid-catalyzed cyclization of the latter compd. gave the indanones I which on hydroxylation and NaIO4 oxidn. or ozonolysis of the corresponding trifluoroacetate gave the isocoumarins II.  
 ST indanone ring enlargement; isocoumarin  
 IT Ring enlargement  
 (of indanones to isocoumarins)  
 IT 61227-50-7P 61227-51-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and cyclization of)  
 IT 16123-39-0P **61227-49-4P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and decarboxylation of)  
 IT 5292-53-5P 6771-54-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and hydrogenation of)  
 IT 61227-52-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and hydroxylation of)  
 IT 5859-68-7P 61227-48-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and methylation of)  
 IT 61227-54-1P 61227-55-2P 61227-56-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and ozonolysis of)  
 IT 61227-53-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and ring enlargement of)  
 IT **16123-38-9P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and sapon. of)  
 IT 830-54-6P 18110-66-2P 60848-62-6P 61227-57-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)  
 IT 591-31-1 7311-34-4  
 RL: RCT (Reactant)  
 (reaction with diethyl malonate)  
 IT 105-53-3  
 RL: RCT (Reactant)  
 (reaction with methoxybenzaldehydes)

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

72.62

199.79

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

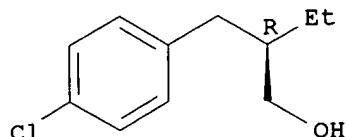
-5.39

-5.39

STN INTERNATIONAL LOGOFF AT 15:59:44 ON 05 JUN 1998

L11 ANSWER 30 OF 34 REGISTRY COPYRIGHT 1998 ACS  
 RN 179951-12-3 REGISTRY  
 CN Benzenepropanol, 4-chloro-.beta.-ethyl-, (R)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C11 H15 Cl O  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



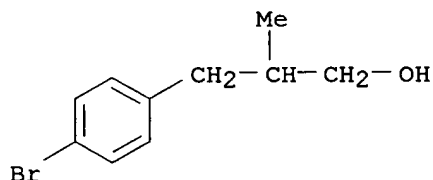
1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 125:142252 CA  
 TI Preparation of phenylalkanols and -alk(en)ols as biocides  
 IN Berscheid, Ralf; Eggensperger, Heinz; Beilfus, Wolfgang; Behrends, Sabine; Puchstein, Burghard  
 PA Schuelke und Mayr GmbH, Germany  
 SO Ger. Offen., 21 pp.  
 CODEN: GWXXBX  
 PI DE 4447361 A1 960627  
 AI DE 94-4447361 941221  
 DT Patent  
 LA German

=> d 25 sub bib

L11 ANSWER 25 OF 34 REGISTRY COPYRIGHT 1998 ACS  
 RN 186497-72-3 REGISTRY  
 CN Benzenepropanol, 4-bromo-.beta.-methyl- (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 2-Methyl-3-(4-bromophenyl)-1-propanol  
 CN 4-Bromo-.beta.-methylbenzenepropanol  
 FS 3D CONCORD  
 MF C10 H13 Br O  
 SR CA  
 LC STN Files: CA, CAPLUS



3 REFERENCES IN FILE CA (1967 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 127:50629 CA  
TI Preparation of substituted biphenylsulfonamide derivatives as endothelin antagonists  
IN Marugesan, Natesan; Barrish, Joel C.; Lloyd, John  
PA Bristol-Myers Squibb Company, Japan  
SO Jpn. Kokai Tokkyo Koho, 23 pp.  
CODEN: JKXXAF  
PI JP 09124620 A2 970513 Heisei  
AI JP 96-262859 961003  
PRAI US 95-60007032 951011  
DT Patent  
LA Japanese

REFERENCE 2

AN 126:343561 CA  
TI Preparation of N-isoxazolyl-biphenylsulfonamides as endothelin antagonists  
IN Murugesan, Natesan; Barrish, Joel C.; Lloyd, John  
PA Bristol-Myers Squibb Company, USA  
SO Eur. Pat. Appl., 33 pp.  
CODEN: EPXXDW  
PI EP 768305 A1 970416  
DS R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE  
AI EP 96-116095 961008  
PRAI US 95-7032 951011  
DT Patent  
LA English

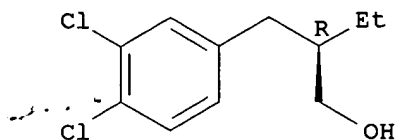
REFERENCE 3

AN 126:144291 CA  
TI N-pyrazinyl-2-phenyl-3-pyridinesulfonamides and analogs endothelin receptor antagonists  
IN Bradbury, Robert Hugh; Butlin, Roger John; James, Roger  
PA Zeneca Limited, UK  
SO PCT Int. Appl., 108 pp.  
CODEN: PIXXD2  
PI WO 9640681 A1 961219  
DS W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG  
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, NL, PT, SE  
AI WO 96-GB1295 960603  
PRAI GB 95-11507 950607  
GB 95-19666 950927  
DT Patent  
LA English

=> d 29 sub bib

L11 ANSWER 29 OF 34 REGISTRY COPYRIGHT 1998 ACS  
RN 179951-14-5 REGISTRY  
CN Benzenepropanol, 3,4-dichloro-.beta.-ethyl-, (R)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C11 H14 Cl2 O  
SR CA  
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 125:142252 CA  
 TI Preparation of phenylalkanols and -alk(en)ols as biocides  
 IN Berscheid, Ralf; Eggensperger, Heinz; Beilfus, Wolfgang; Behrends, Sabine; Puchstein, Burghard  
 PA Schuelke und Mayr GmbH, Germany  
 SO Ger. Offen., 21 pp.  
 CODEN: GWXXBX  
 PI DE 4447361 A1 960627  
 AI DE 94-4447361 941221  
 DT Patent  
 LA German

=> log y

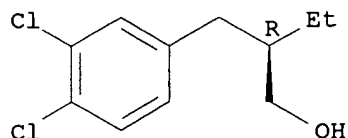
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	237.13	237.28

STN INTERNATIONAL LOGOFF AT 14:02:53 ON 05 JUN 1998

=> d ide bib abs 1-9

L11 ANSWER 1 OF 9 REGISTRY COPYRIGHT 1997 ACS  
RN 179951-14-5 REGISTRY  
CN Benzenepropanol, 3,4-dichloro-.beta.-ethyl-, (R)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C11 H14 Cl2 O  
SR CA  
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

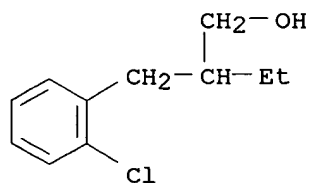


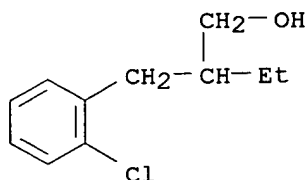
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 125:142252 CA  
TI Preparation of phenylalkanols and -alk(en)ols as biocides  
IN Berscheid, Ralf; Eggensperger, Heinz; Beilfus, Wolfgang; Behrends, Sabine; Puchstein, Burghard  
PA Schuelke und Mayr GmbH, Germany  
SO Ger. Offen., 21 pp.  
CODEN: GWXXBX  
PI DE 4447361 A1 960627  
AI DE 94-4447361 941221  
DT Patent  
LA German  
AB RCH2CR1R2(CH2)nOH and RCH:CR1(CH2)nOH [R = (un)substituted Ph; R1 = H, (O- or S-interrupted) alkyl; R2 = (O- or S-interrupted) alkyl; n = 1 or 2] were prepd. Data for biol. activity of title compds. were given.

L11 ANSWER 2 OF 9 REGISTRY COPYRIGHT 1997 ACS  
RN 179951-13-4 REGISTRY  
CN Benzenepropanol, 2-chloro-.beta.-ethyl- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C11 H15 Cl O  
SR CA  
LC STN Files: CA, CAPLUS





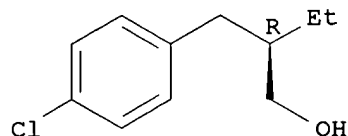
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 125:142252 CA  
TI Préparation of phenylalkanols and -alk(en)ols as biocides  
IN Berscheid, Ralf; Eggensperger, Heinz; Beilfus, Wolfgang; Behrends, Sabine; Puchstein, Burghard  
PA Schuelke und Mayr GmbH, Germany  
SO Ger. Offen., 21 pp.  
CODEN: GWXXBX  
PI DE 4447361 A1 960627  
AI DE 94-4447361 941221  
DT Patent  
LA German  
AB  $RCH_2CR_1R_2(CH_2)_nOH$  and  $RCH:CR_1(CH_2)_nOH$  [ $R$  = (un)substituted Ph;  $R_1$  = H, (O- or S-interrupted) alkyl;  $R_2$  = (O- or S-interrupted) alkyl;  $n$  = 1 or 2] were prep'd. Data for biol. activity of title compds. were given.

L11 ANSWER 3 OF 9 REGISTRY COPYRIGHT 1997 ACS  
RN 179951-12-3 REGISTRY  
CN Benzenepropanol, 4-chloro-.beta.-ethyl-, (R)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C11 H15 Cl O  
SR CA  
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

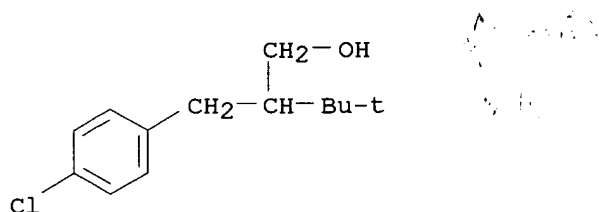
REFERENCE 1

AN 125:142252 CA  
TI Preparation of phenylalkanols and -alk(en)ols as biocides  
IN Berscheid, Ralf; Eggensperger, Heinz; Beilfus, Wolfgang; Behrends, Sabine; Puchstein, Burghard  
PA Schuelke und Mayr GmbH, Germany  
SO Ger. Offen., 21 pp.  
CODEN: GWXXBX  
PI DE 4447361 A1 960627  
AI DE 94-4447361 941221  
DT Patent  
LA German  
AB  $RCH_2CR_1R_2(CH_2)_nOH$  and  $RCH:CR_1(CH_2)_nOH$  [ $R$  = (un)substituted Ph;  $R_1$  = H, (O- or S-interrupted) alkyl;  $R_2$  = (O- or S-interrupted) alkyl;  $n$  = 1 or 2] were prep'd. Data for biol. activity of title compds. were given.



= 1 or 2] were prepd. Data for biol. activity of title compds. were given.

L11 ANSWER 4 OF 9 REGISTRY COPYRIGHT 1997 ACS  
RN 107021-89-6 REGISTRY  
CN Benzenepropanol, 4-chloro-.beta.-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C13 H19 Cl O  
SR CA  
LC STN Files: CA, CAPLUS, TOXLIT

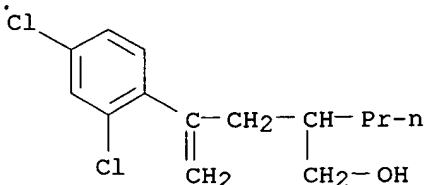


1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 106:115193 CA  
TI 1-Acylimidazoles with broad-spectrum fungicidal activity  
AU Manabe, Akio; Kirino, Osamu; Funaki, Yuji; Hisada, Yoshio; Takano, Hirotaka; Tanaka, Shizuya  
CS Takarazuka Res. Cent., Sumitomo Chem. Co., Ltd., Takarazuka, 665, Japan  
SO Agric. Biol. Chem. (1986), 50(12), 3215-17  
CODEN: ABCHA6; ISSN: 0002-1369  
DT Journal  
LA English  
AB The fungicidal activity of six 1-[2-(4-chlorobenzyl)-3,3-dimethylbutanoyl]azoles and related compds. were evaluated against powdery mildew of barley and gray mold of cucumber in pot expts. 1-[2-(4-Chlorobenzyl)-3,3-dimethylbutanoyl]imidazole (I) [89371-98-2] exhibited both curative and preventive activity against Erysiphe graminis and Botrytis cinerea. Replacement of the imidazole moiety of I with 1,2,4-triazole or introduction of a Me group at the 2- or 4-position of the imidazole moiety markedly decreased activity. The steric property around the 3-N atom of the imidazole ring is important for high activity and the 1-acylimidazole skeleton appears to be important for broad spectrum fungicidal activity.

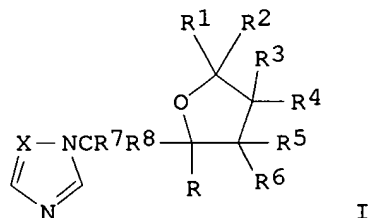
L11 ANSWER 5 OF 9 REGISTRY COPYRIGHT 1997 ACS  
RN 89058-47-9 REGISTRY  
CN Benzenebutanol, 2,4-dichloro-.delta.-methylene-.beta.-propyl- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C14 H18 Cl2 O  
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

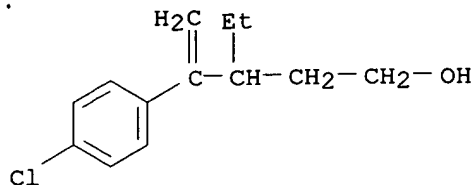
REFERENCE 1

AN 100:103338 CA  
TI Triazole and imidazole derivatives  
IN Marchington, Anthony Frank; Lewis, Timothy; Clough, John Martin;  
Worthington, Paul Anthony; Griffin, David Alan; Dalziel, John  
PA Imperial Chemical Industries PLC, UK  
SO Brit. UK Pat. Appl., 57 pp.  
CODEN: BAXXDU  
PI GB 2115408 A1 830907  
AI GB 83-95 830105  
PRAI GB 82-3707 820209  
GB 82-11290 820419  
GB 82-13652 820511  
GB 82-31263 821102  
DT Patent  
LA English  
GI



AB The plant growth regulation and fungicidal title compds. I [R = (un)substituted aryl, aralkyl, alkyl; R1-R6 = H, (un)substituted alkyl, cycloalkyl, aralkyl, or Ph; R7, R8 = H, alkyl, (un)substituted Ph, X = CH, N] and their acid addn. salts and metal complexes were prepd. Thus, p-ClC6H4C(:CH2)CH2CH2CH(OH)CH2CH2Me prepd. in 5 steps from 4-ClC6H4CHO and H2C:CHCO2Me, was brominated with Br to give 2-(4-chlorophenyl)-3-(bromomethyl)-5-propyltetrahydrofuran, which was treated with 1,2,4-triazole sodium salt to give I (R = 4-ClC6H4, R1 = Pr, R2-R8 = H, X = N) (II). At 0.05% II completely controlled Butrytis cinereo on apples. At 4.0 kg/ha I (R = 2-FC6H4, R1 = Me, R2-R8 = H, X = N) reduced the height of barley to 77% that of control.

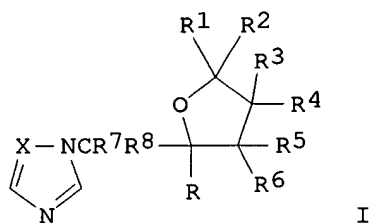
L11 ANSWER 6 OF 9 REGISTRY COPYRIGHT 1997 ACS  
RN 89058-41-3 REGISTRY  
CN Benzenebutanol, 4-chloro-.gamma.-ethyl-.delta.-methylene- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C13 H17 Cl O  
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

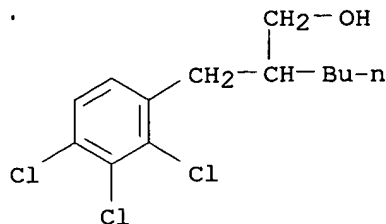
REFERENCE 1

AN 100:103338 CA  
TI Triazole and imidazole derivatives  
IN Marchington, Anthony Frank; Lewis, Timothy; Clough, John Martin;  
Worthington, Paul Anthony; Griffin, David Alan; Dalziel, John  
PA Imperial Chemical Industries PLC, UK  
SO Brit. UK Pat. Appl., 57 pp.  
CODEN: BAXXDU  
PI GB 2115408 A1 830907  
AI GB 83-95 830105  
PRAI GB 82-3707 820209  
GB 82-11290 820419  
GB 82-13652 820511  
GB 82-31263 821102  
DT Patent  
LA English  
GI



AB The plant growth regulation and fungicidal title compds. I [R = (un)substituted aryl, aralkyl, alkyl; R1-R6 = H, (un)substituted alkyl, cycloalkyl, aralkyl, or Ph; R7, R8 = H, alkyl, (un)substituted Ph, X = CH, N] and their acid addn. salts and metal complexes were prepd. Thus, p-ClC6H4C(:CH2)CH2CH2CH(OH)CH2CH2Me prepd. in 5 steps from 4-ClC6H4CHO and H2C:CHCO2Me, was brominated with Br to give 2-(4-chlorophenyl)-3-(bromomethyl)-5-propyltetrahydrofuran, which was treated with 1,2,4-triazole sodium salt to give I (R = 4-ClC6H4, R1 = Pr, R2-R8 = H, X = N) (II). At 0.05% II completely controlled Butrytis cinereo on apples. At 4.0 kg/ha I (R = 2-FC6H4, R1 = Me, R2-R8 = H, X = N) reduced the height of barley to 77% that of control.

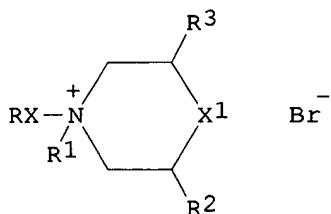
L11 ANSWER 7 OF 9 REGISTRY COPYRIGHT 1997 ACS  
RN 85705-73-3 REGISTRY  
CN Benzenepropanol, .beta.-butyl-2,3,4-trichloro- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C13 H17 Cl3 O  
LC STN Files: CA, CAPLUS, USPATFULL



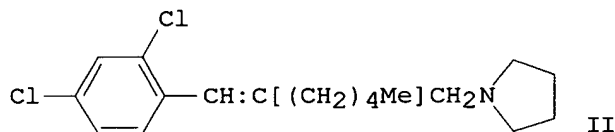
2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 99:122286 CA  
TI Fungicides containing phenylpropylammonium salt and methods for control of fungi  
IN Buschmann, Ernst; Zeeh, Bernd; Pommer, Ernst Heinrich; Ammermann, Eberhard  
PA BASF A.-G. , Fed. Rep. Ger.  
SO Ger. Offen., 36 pp.  
CODEN: GWXXBX  
PI DE 3135592 A1 830317  
AI DE 81-3135592 810909  
DT Patent  
LA German  
GI



I



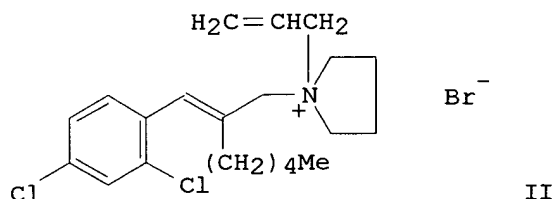
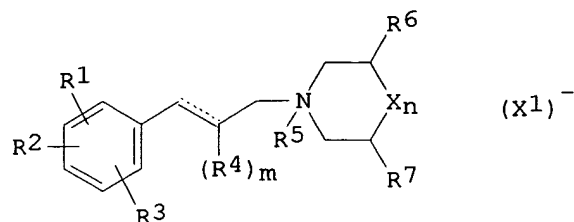
II

AB Title compds. I [R = (un)substituted Ph; R1 = alkyl, alkenyl, alkynyl, aralkyl; R2, R3 = H, alkyl, CH2OH, OH; X = alkylene, alkenylene; X1 = bond, alkylene, CO, O, S] were prepd. as fungicides. Thus, 2,4-Cl2C6H3CHO was condensed with heptanal to give 2,4-Cl2C6H3CH:C(CHO)(CH2)4Me, which was reduced to the alc., which was brominated and then condensed with pyrrolidine to give II. II was treated with CH2:CHCH2Br to give I [R = 2,4-Cl2C6H3, R1 = allyl, R3 = R4 = H, X = CH:C[(CH2)4Me]CH2, X1 = bond]. At 0.025%, I are more effective than captan against *Phytophthora infestans* on tomato seedlings.

REFERENCE 2

AN 99:22341 CA  
TI Fungicides containing phenylpropylammonium salts and control of fungi  
IN Buschmann, Ernst; Zeeh, Bernd; Pommer, Ernst Heinrich; Ammermann, Eberhard

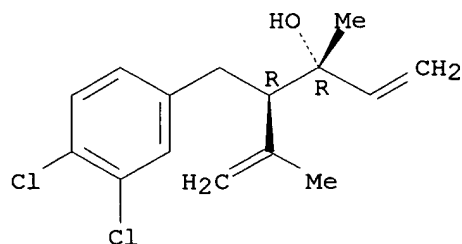
PA BASF A.-G. , Fed. Rep. Ger.  
 SO Ger. Offen., 38 pp.  
 CODEN: GWXXBX  
 PI DE 3134220 A1 830310  
 AI DE 81-3134220 810829  
 DT Patent  
 LA German  
 GI



AB Quaternary ammonium salts I [R1, R2, R3 independently = H, (halo)alkyl, (un)substituted aryl or aralkyl, cycloalkyl, alkoxy, acyl, halo; R4 = alkyl, alkenyl, alkoxy, R5 = aliph. group, (un)substituted aralkyl; R6, R7 = H, alkyl, CH2OH, OH; X = CH2, O, S, CO, (CH2)2, CH2CHR8 (R8 = alkyl); m = 0-2; n = 0, 1; (X1) = anion non-phytotoxic acid], useful as agricultural fungicides (no data), were prepd. Pyrrolidinium salt II was prepd. in 5 steps from 2,4-Cl2C6H3CHO and Me(CH2)5CHO. Some of the I prepd. had a better fungicide activity at 0.05 than N-trichloromethylthiotetrahydrophallimide (no further information).

L11 ANSWER 8 OF 9 REGISTRY COPYRIGHT 1997 ACS  
 RN 67935-88-0 REGISTRY  
 CN Benzenepropanol, 3,4-dichloro-.alpha.-ethenyl-.alpha.-methyl-.beta.-(1-methylethenyl)-, (R\*,R\*)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C15 H18 Cl2 O  
 LC STN Files: CA, CAPLUS

Relative stereochemistry.

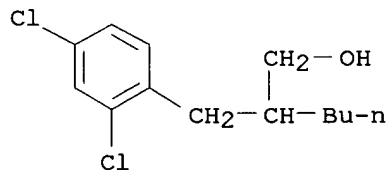


1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 89:163214 CA  
 TI A novel method for introduction of the isoprene skeleton into chloromethylarenes and -heteroarenes via a three-step sequence involving a solvent-assisted Claisen-Cope rearrangement  
 AU Fujita, Yoshiji; Onishi, Takashi; Nishida, Takashi  
 CS Cent. Res. Lab., Kuraray Co., Ltd., Kurashiki, Japan  
 SO Synthesis (1978), (8), 612-14  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DT Journal  
 LA English  
 AB Treatment of  $\text{RCH}_2\text{Cl}$  (I, R = Ph, substituted Ph, 2-furyl, 2-thienyl) with  $\text{Me}_2\text{C}:\text{CHCOMe}$  (II) and  $\text{NaNH}_2$  in liq.  $\text{NH}_3\text{-Et}_2\text{O}$  (1:1) gave .apprx.65-70% product, predominantly  $\text{MeCOCH}(\text{CH}_2\text{R})\text{CMe}:\text{CH}_2$  (III), whereas reaction of I with II in 55% aq. NaOH using a phase-transfer catalyst gave .apprx.80% of a mixt. of III and  $\text{MeCOC}(\text{CH}_2\text{R})\text{:CMe}_2$ . The Grignard reaction of III with  $\text{CH}_2:\text{CHBr}$  in THF gave .apprx.80%  $\text{CH}_2:\text{CHCMe}(\text{OH})\text{CH}(\text{CH}_2\text{R})\text{CMe}:\text{CH}_2$  (IV), thermal rearrangement of which, neat, at 170-90.degree., gave 55-9%  $\text{RCH}_2\text{CH:CMe}(\text{CH}_2)_3\text{COMe}$  (V), contg. 60-5% of E isomer; however, in the presence of 2 vols. of 1-methyl-2-pyrrolidinone at 190.degree., the rearrangement gave 78-83% V contg. 70-5% E isomer. The improved yield and selectivity is attributed to solvent assistance in the Claisen-Cope rearrangement.

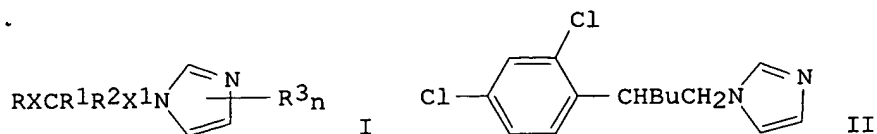
L11 ANSWER 9 OF 9 REGISTRY COPYRIGHT 1997 ACS  
 RN 61023-57-2 REGISTRY  
 CN Benzenepropanol, .beta.-butyl-2,4-dichloro- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C13 H18 Cl2 O  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL  
 (\*File contains numerically searchable property data)



3 REFERENCES IN FILE CA (1967 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

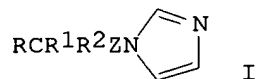
AN 90:87455 CA  
 TI 1-Substituted aralkyl imidazoles  
 IN Miller, George A.; Chan, Hak-Foon  
 PA Rohm and Haas Co., USA  
 SO U.S., 23 pp.  
 CODEN: USXXAM  
 PI US 4118461 781003  
 AI US 75-547291 750205  
 DT Patent  
 LA English  
 GI



AB Imidazoles I (R = aryl, furyl, thienyl; CR1R2 = C3-8 cycloalkanediyl; R3 = C1-4 alkyl, halogen, NO2; X, X1 = bond, C1-5 alkylene; n = 0-3) (104 compds.) were prepd. Thus treating 2,4-Cl2C6H3CH2CO2Et with IBu gave 2,4-Cl2C6H3CHBuCO2Et, which was reduced to the alc., mesylated, and treated with imidazole to give II. At 300 ppm II gave .gtoreq.97% control of Erysiphe polygoni on beans.

#### REFERENCE 2

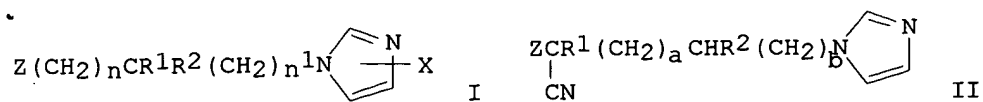
AN 90:87450 CA  
 TI 1-Substituted aralkyl imidazoles  
 IN Miller, George A.; Owen, Ronald P.  
 PA Rohm and Haas Co., USA  
 SO U.S., 22 pp.  
 CODEN: USXXAM  
 PI US 4115578 780919  
 AI US 75-547291 750205  
 DT Patent  
 LA English  
 GI



AB 1-(.omega.-Phenylalkyl)imidazoles [R or R2 = H, Ph, halophenyl, alkylphenyl, alkoxyphenyl, nitrophenyl, aminophenyl, (methylthio)phenyl, (trihalomethyl)phenyl; R1 = H, alkyl, alkenyl, aralkyl; Z = C1-5 alkylene] (104 compds.) were prepd. and showed fungicidal activity. Thus, alkylating 2,4-Cl2C6H3CH2CO2Et with BuI and then redn. gave 2,4-Cl2C6H3CHBuCH2OH, which was O-mesylated; treating imidazole with the mesylate gave I (R = 2,4-Cl2C6H3, R1 = Bu, R2 = H, Z = CH2), which at 300 ppm. gave 90-100% control of various test fungi on beans.

#### REFERENCE 3

AN 86:1093 CA  
 TI Imidazole fungicides  
 IN Miller, George Allen; Carley, Harold E.; Chan, Hak-Foon  
 PA Rohm and Haas Co., USA  
 SO Ger. Offen., 145 pp.  
 CODEN: GWXXBX  
 PI DE 2604047 760916  
 PRAI US 75-547291 750205  
 DT Patent  
 LA German  
 GI

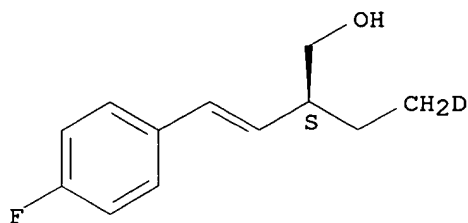


AB The imidazole derivs. I (Z = halophenyl, heterocyclic radical, etc; n and n2 = 0, 1, or 2; R1 = lower alkyl, R2 = H or Me; X = H, 2-Me, 4-NO2, etc) and II (Z = Ph, alkylphenyl, halophenyl etc; R1 = H, alkyl, etc; R2 = H, Pr, or Ph; a and b = 0, 1, 2, 3, or 4) and I and II salts and adducts are fungicides. Thus, 300 ppm 1- $\beta$ -(2,4-dichlorophenyl)heryl]imidazole [58831-30-4] completely controlled *Helminthosporium teres* on barley, *Grysishe polygoni* on bean, and *Puccinia recondita* on wheat, in pot expts. The synthesis of I and II is given.



L11 ANSWER 1 OF 16 REGISTRY COPYRIGHT 1997 ACS  
 RN 190185-59-2 REGISTRY  
 CN 3-Buten-1-ol, 2-(ethyl-2-d)-4-(4-fluorophenyl)-, (S)- (9CI) (CA  
 INDEX NAME)  
 FS STEREOSEARCH  
 MF C12 H14 D F O  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.  
 Double bond geometry unknown.



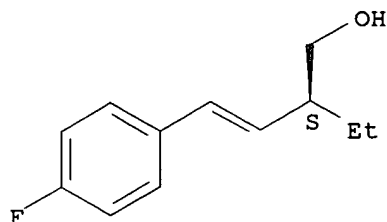
1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

#### REFERENCE 1

AN 127:4876 CA  
 TI Zirconium-catalyzed enantioselective 2-aluminoethylalumination of  
 alkenes  
 AU Dawson, Graham; Durrant, Charles A.; Kirk, George G.; Whitby,  
 Richard J.  
 CS Dep. Chem., Univ. Southampton, Southampton, SO17 1BJ, UK  
 SO Tetrahedron Lett. (1997), 38(13), 2335-2338  
 CODEN: TELEAY; ISSN: 0040-4039  
 PB Elsevier  
 DT Journal  
 LA English  
 AB Asym. 2-aluminoethylalumination of mono-substituted alkenes and  
 2,5-dihydrofurans catalyzed by (R,R)-ethylene-1,2-bis(.eta.5-4,5,6,7-  
 tetrahydro-1-indenyl)zirconium (R)-1,1'-binaphth-2,2'-diolate and  
 .eta.5-cyclopentadienyl-.eta.5-(1-neomenthyl-4,5,6,7-  
 tetrahydroindenyl)zirconium dichloride. gave 30-99% enantiomeric  
 excesses. The so formed organoaluminum has potential for further  
 elaboration leading to enantiomerically enriched products.

L11 ANSWER 2 OF 16 REGISTRY COPYRIGHT 1997 ACS  
 RN 184047-37-8 REGISTRY  
 CN 3-Buten-1-ol, 2-ethyl-4-(4-fluorophenyl)-, (S)- (9CI) (CA INDEX  
 NAME)  
 FS STEREOSEARCH  
 MF C12 H15 F O  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.  
 Double bond geometry unknown.



2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

#### REFERENCE 1

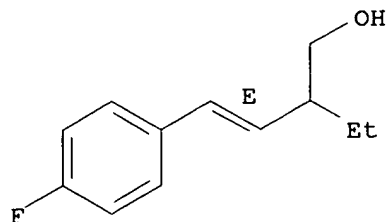
AN 127:4876 CA  
TI Zirconium-catalyzed enantioselective 2-aluminoethylalumination of alkenes  
AU Dawson, Graham; Durrant, Charles A.; Kirk, George G.; Whitby, Richard J.  
CS Dep. Chem., Univ. Southampton, Southampton, SO17 1BJ, UK  
SO Tetrahedron Lett. (1997), 38(13), 2335-2338  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier  
DT Journal  
LA English  
AB Asym. 2-aluminoethylalumination of mono-substituted alkenes and 2,5-dihydrofurans catalyzed by (R,R)-ethylene-1,2-bis(.eta.5-4,5,6,7-tetrahydro-1-indenyl)zirconium (R)-1,1'-binaphth-2,2'-diolate and .eta.5-cyclopentadienyl-.eta.5-(1-neomenthyl-4,5,6,7-tetrahydroindenyl)zirconium dichloride. gave 30-99% enantiomeric excesses. The so formed organoaluminum has potential for further elaboration leading to enantiomerically enriched products.

#### REFERENCE 2

AN 126:7439 CA  
TI Catalytic asymmetric carbomagnesiation of unactivated alkenes. A new, effective, active, cheap and recoverable chiral zirconocene  
AU Bell, Louise; Whitby, Richard J.; Jones, Raymond V. H.; Standen, Michael C. H.  
CS Dep. Chem., The University, Southampton, SO17 1BJ, UK  
SO Tetrahedron Lett. (1996), 37(39), 7139-7142  
CODEN: TELEAY; ISSN: 0040-4039  
DT Journal  
LA English  
AB The ethylmagnesiation of terminal alkenes, e.g., PhNHCH<sub>2</sub>CH:CH<sub>2</sub>, catalyzed by (R,R)-ethylene-1,2-bis(.eta.5-4,5,6,7-tetrahydro-1-indenyl)zirconium (R)-1,1'-binaphth-2,2'-diolate gave low turnovers and enantioexcesses. A novel Ci sym. zirconocene dichloride CpCp'ZrCl<sub>2</sub> (Cp = C<sub>5</sub>H<sub>5</sub>, Cp' = 1-neomenthyl-4,5,6,7-tetrahydroindenyl) was prepd. which gave better enantioselectivity, is cheaper to make, catalytically more active, and recoverable.

L11 ANSWER 3 OF 16 REGISTRY COPYRIGHT 1997 ACS  
RN 182073-38-7 REGISTRY  
CN 3-Buten-1-ol, 2-ethyl-4-(4-fluorophenyl)-, (E)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C12 H15 F O  
SR CA  
LC STN Files: CA, CAPLUS

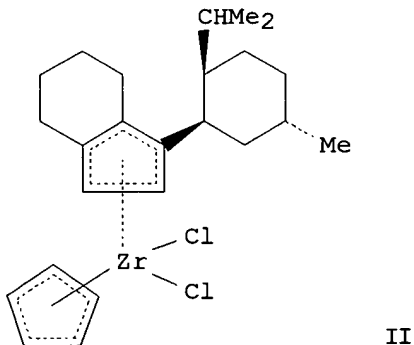
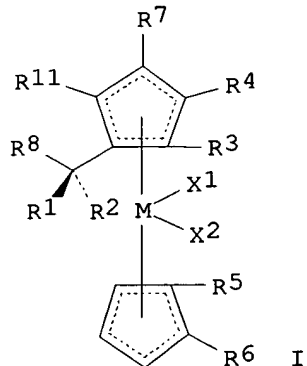
Double bond geometry as shown.



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

# REFERENCE 1

AN 125:248112 CA  
TI Chiral organometallic compounds  
IN Jones, Raymond Vincent Heaven; Standen, Michael Charles Henry;  
Whitby, Richard John; Bell, Jane Louise  
PA Zeneca Limited, UK  
SO PCT Int. Appl., 45 pp.  
CODEN: PIXXD2  
PI WO 9625420 A1 960822  
DS W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,  
ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,  
LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,  
SG, SI  
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR,  
IE, IT, LU, MC, ML, MR, NE, NL, PT, SE  
AI WO 96-GB264 960206  
PRAI GB 95-2870 950214  
DT Patent  
LA English  
GI

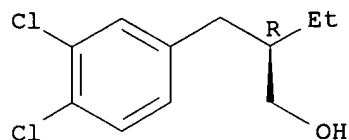


AB Chiral, organometallic compds. which, at a mol. level, have no C2 symmetry and comprise C to C bonds joining chiral C atoms to C atoms of cyclopentadiene rings that are nonsym. substituted are disclosed. Examples of such compds. include compds. I wherein X1 and X2 are independently groups which are removable during a chem. reaction and M is Ti, Zr or Hf. An example of a prepd. compd. is I.

L11 ANSWER 4 OF 16 REGISTRY COPYRIGHT 1997 ACS  
RN 179951-14-5 REGISTRY  
CN Benzenepropanol, 3,4-dichloro-.beta.-ethyl-, (R)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C11 H14 Cl2 O

SR CA  
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

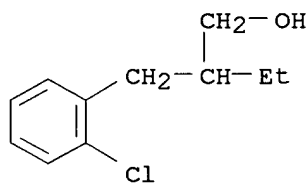


1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 125:142252 CA  
TI Preparation of phenylalkanols and -alk(en)ols as biocides  
IN Berscheid, Ralf; Eggensperger, Heinz; Beilfus, Wolfgang; Behrends, Sabine; Puchstein, Burghard  
PA Schuelke und Mayr GmbH, Germany  
SO Ger. Offen., 21 pp.  
CODEN: GWXXBX  
PI DE 4447361 A1 960627  
AI DE 94-4447361 941221  
DT Patent  
LA German  
AB RCH2CR1R2(CH2)nOH and RCH:CR1(CH2)nOH [R = (un)substituted Ph; R1 = H, (O- or S-interrupted) alkyl; R2 = (O- or S-interrupted) alkyl; n = 1 or 2] were prepd. Data for biol. activity of title compds. were given.

L11 ANSWER 5 OF 16 REGISTRY COPYRIGHT 1997 ACS  
RN 179951-13-4 REGISTRY  
CN Benzenepropanol, 2-chloro-.beta.-ethyl- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C11 H15 Cl O  
SR CA  
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

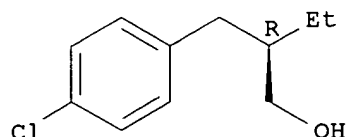
REFERENCE 1

AN 125:142252 CA  
TI Preparation of phenylalkanols and -alk(en)ols as biocides  
IN Berscheid, Ralf; Eggensperger, Heinz; Beilfus, Wolfgang; Behrends, Sabine; Puchstein, Burghard  
PA Schuelke und Mayr GmbH, Germany  
SO Ger. Offen., 21 pp.  
CODEN: GWXXBX  
PI DE 4447361 A1 960627  
AI DE 94-4447361 941221

DT Patent  
 LA German  
 AB  $\text{RCH}_2\text{CR}_1\text{R}_2(\text{CH}_2)_n\text{OH}$  and  $\text{RCH:CR}_1(\text{CH}_2)_n\text{OH}$  [ $\text{R}$  = (un)substituted Ph;  $\text{R}_1$  = H, (O- or S-interrupted) alkyl;  $\text{R}_2$  = (O- or S-interrupted) alkyl;  $n$  = 1 or 2] were prepd. Data for biol. activity of title compds. were given.

L11 ANSWER 6 OF 16 REGISTRY COPYRIGHT 1997 ACS  
 RN 179951-12-3 REGISTRY  
 CN Benzenepropanol, 4-chloro-.beta.-ethyl-, (R)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C11 H15 Cl O  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.

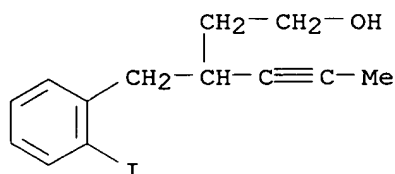


1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

#### REFERENCE 1

AN 125:142252 CA  
 TI Preparation of phenylalkanols and -alk(en)ols as biocides  
 IN Berscheid, Ralf; Eggensperger, Heinz; Beilfus, Wolfgang; Behrends, Sabine; Puchstein, Burghard  
 PA Schuelke und Mayr GmbH, Germany  
 SO Ger. Offen., 21 pp.  
 CODEN: GWXXBX  
 PI DE 4447361 A1 960627  
 AI DE 94-4447361 941221  
 DT Patent  
 LA German  
 AB  $\text{RCH}_2\text{CR}_1\text{R}_2(\text{CH}_2)_n\text{OH}$  and  $\text{RCH:CR}_1(\text{CH}_2)_n\text{OH}$  [ $\text{R}$  = (un)substituted Ph;  $\text{R}_1$  = H, (O- or S-interrupted) alkyl;  $\text{R}_2$  = (O- or S-interrupted) alkyl;  $n$  = 1 or 2] were prepd. Data for biol. activity of title compds. were given.

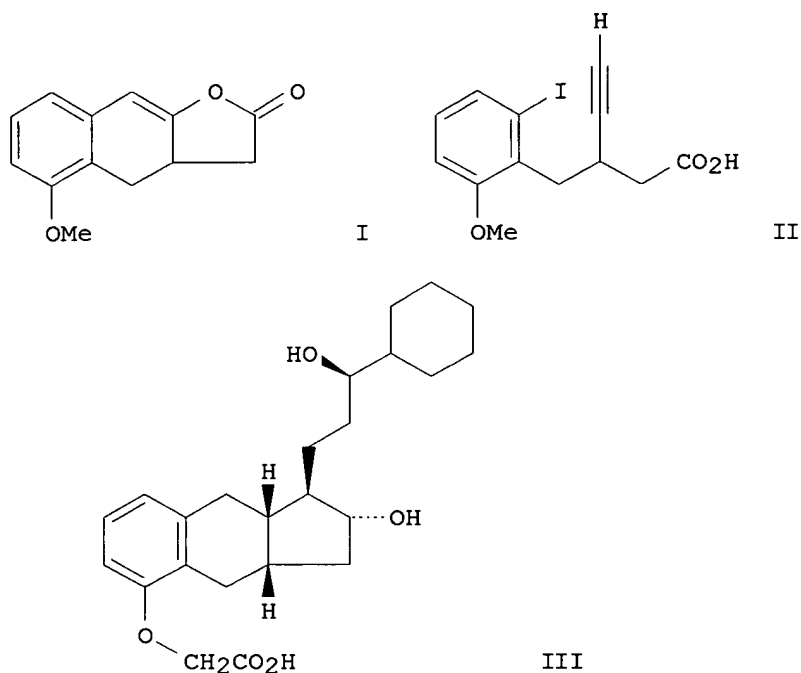
L11 ANSWER 7 OF 16 REGISTRY COPYRIGHT 1997 ACS  
 RN 175235-58-2 REGISTRY  
 CN Benzenebutanol, 2-iodo-.gamma.-1-propynyl- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C13 H15 I O  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT



2 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

# REFERENCE 1

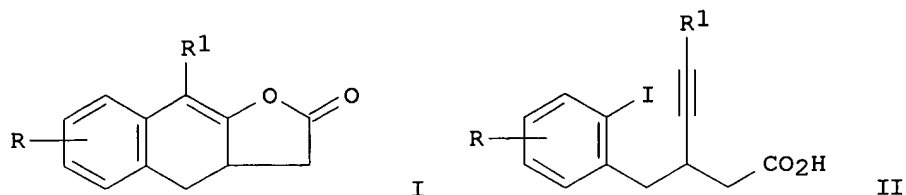
AN 125:248135 CA  
 TI A new route to .gamma.-arylidenebutyrolactones via a tandem carbopalladation-heterocyclization sequence: a formal synthesis of U-68,215  
 AU Cavicchioli, Marcello; Decortiat, Sylvie; Bouyssi, Didier; Gore, Jacques; Balme, Genevieve  
 CS Lab. Chim, Org. I, Univ. Claude Bernard, Villeurbanne, 69622, Fr.  
 SO Tetrahedron (1996), 52(35), 11463-11478  
 CODEN: TETRAB; ISSN: 0040-4020  
 DT Journal  
 LA English  
 GI



AB Benzo-annulated enol lactones, e.g. I, are obtained in good yields from pentynoic acids 3- or 5-substituted with an iodo-aryl moiety, e.g. II, by palladium-catalyzed cyclization of their potassium carboxylates. Using this approach, an efficient new route to U-68,215 (III) is described.

# REFERENCE 2

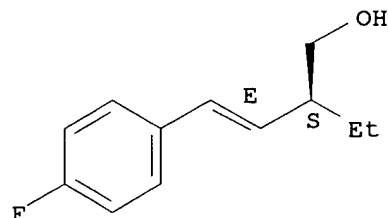
AN 124:260694 CA  
 TI Palladium-mediated intramolecular cyclization of substituted pentynoic acids. A new route to .gamma.-arylidenebutyrolactones  
 AU Cavicchioli, M.; Bouyssi, D.; Gore, J.; Balme, G.  
 CS Laboratoire Chimie Organique I, Univ. Claude Bernard, Villeurbanne, 69622, Fr.  
 SO Tetrahedron Lett. (1996), 37(9), 1429-32  
 CODEN: TELEAY; ISSN: 0040-4039  
 DT Journal  
 LA English  
 GI



AB Benzo-annulated enol lactones, e.g. I (R = H, R1 = H, Me), are obtained in good yields from pentynoic acids 3- or 5-substituted, e.g. II, with an iodoaryl moiety by palladium-catalyzed cyclization of their potassium carboxylates.

L11 ANSWER 8 OF 16 REGISTRY COPYRIGHT 1997 ACS  
 RN 166767-92-6 REGISTRY  
 CN 3-Buten-1-ol, 2-ethyl-4-(4-fluorophenyl)-, [S-(E)]- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C12 H15 F O  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.  
 Double bond geometry as shown.



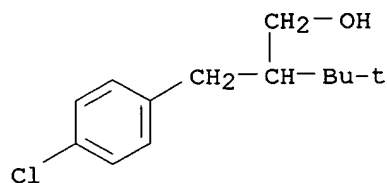
1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

#### REFERENCE 1

AN 123:143560 CA  
 TI Zirconocene-catalyzed kinetic resolution of dihydrofurans  
 AU Visser, Michael S.; Hoveyda, Amin H.  
 CS Dep. Chem., Boston Coll., Chestnut Hill, MA, 02167, USA  
 SO Tetrahedron (1995), 51(15), 4383-94  
 CODEN: TETRAB; ISSN: 0040-4020  
 DT Journal  
 LA English  
 AB Zirconocene-catalyzed kinetic resoln. of dihydrofurans may be affected in the presence of 10 mol% non-racemic (EBTHI)ZrCl<sub>2</sub> [ethylene-1,2-bis(.eta.5-4,5,6,7-tetrahydro-1-indenyl)zirconium dichloride]. Transformations reported herein proceed efficiently to afford two constitutionally distinct and readily separable products with excellent levels of diastereo- and enantioselectivity. Prepn. and resoln. of the substrate furans may be carried out in a single pot.

L11 ANSWER 9 OF 16 REGISTRY COPYRIGHT 1997 ACS  
 RN 107021-89-6 REGISTRY  
 CN Benzenepropanol, 4-chloro-.beta.-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C13 H19 Cl O

SR CA  
LC STN Files: CA, CAPLUS, TOXLIT

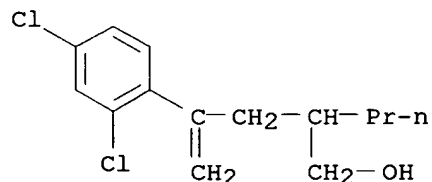


1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 106:115193 CA  
TI 1-Acylimidazoles with broad-spectrum fungicidal activity  
AU Manabe, Akio; Kirino, Osamu; Funaki, Yuji; Hisada, Yoshio; Takano, Hirotaka; Tanaka, Shizuya  
CS Takarazuka Res. Cent., Sumitomo Chem. Co., Ltd., Takarazuka, 665, Japan  
SO Agric. Biol. Chem. (1986), 50(12), 3215-17  
CODEN: ABCHA6; ISSN: 0002-1369  
DT Journal  
LA English  
AB The fungicidal activity of six 1-[2-(4-chlorobenzyl)-3,3-dimethylbutanoyl]azoles and related compds. were evaluated against powdery mildew of barley and gray mold of cucumber in pot expts. 1-[2-(4-Chlorobenzyl)-3,3-dimethylbutanoyl]imidazole (I) [89371-98-2] exhibited both curative and preventive activity against Erysiphe graminis and Botrytis cinerea. Replacement of the imidazole moiety of I with 1,2,4-triazole or introduction of a Me group at the 2- or 4-position of the imidazole moiety markedly decreased activity. The steric property around the 3-N atom of the imidazole ring is important for high activity and the 1-acylimidazole skeleton appears to be important for broad spectrum fungicidal activity.

L11 ANSWER 10 OF 16 REGISTRY COPYRIGHT 1997 ACS  
RN 89058-47-9 REGISTRY  
CN Benzenebutanol, 2,4-dichloro-.delta.-methylene-.beta.-propyl- (9CI)  
(CA INDEX NAME)  
FS 3D CONCORD  
MF C14 H18 Cl2 O  
LC STN Files: CA, CAPLUS, USPATFULL



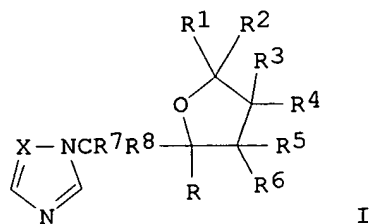
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 100:103338 CA

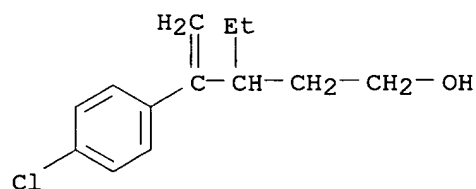


TI Triazole and imidazole derivatives  
 IN Marchington, Anthony Frank; Lewis, Timothy; Clough, John Martin;  
 Worthington, Paul Anthony; Griffin, David Alan; Dalziel, John  
 PA Imperial Chemical Industries PLC, UK  
 SO Brit. UK Pat. Appl., 57 pp.  
 CODEN: BAXXDU  
 PI GB 2115408 A1 830907  
 AI GB 83-95 830105  
 PRAI GB 82-3707 820209  
 GB 82-11290 820419  
 GB 82-13652 820511  
 GB 82-31263 821102  
 DT Patent  
 LA English  
 GI



AB The plant growth regulation and fungicidal title compds. I [R = (un)substituted aryl, aralkyl, alkyl; R1-R6 = H, (un)substituted alkyl, cycloalkyl, aralkyl, or Ph; R7, R8 = H, alkyl, (un)substituted Ph, X = CH, N] and their acid addn. salts and metal complexes were prepd. Thus, p-ClC6H4C(:CH2)CH2CH2CH(OH)CH2CH2Me prepd. in 5 steps from 4-ClC6H4CHO and H2C:CHCO2Me, was brominated with Br to give 2-(4-chlorophenyl)-3-(bromomethyl)-5-propyltetrahydrofuran, which was treated with 1,2,4-triazole sodium salt to give I (R = 4-ClC6H4, R1 = Pr, R2-R8 = H, X = N) (II). At 0.05% II completely controlled Butrytis cinereo on apples. At 4.0 kg/ha I (R = 2-FC6H4, R1 = Me, R2-R8 = H, X = N) reduced the height of barley to 77% that of control.

L11 ANSWER 11 OF 16 REGISTRY COPYRIGHT 1997 ACS  
 RN 89058-41-3 REGISTRY  
 CN Benzenebutanol, 4-chloro-.gamma.-ethyl-.delta.-methylene- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C13 H17 Cl O  
 LC STN Files: CA, CAPLUS, USPATFULL

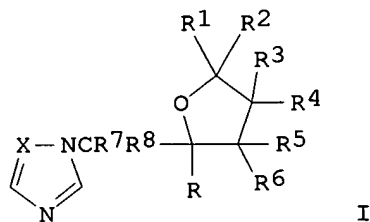


1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

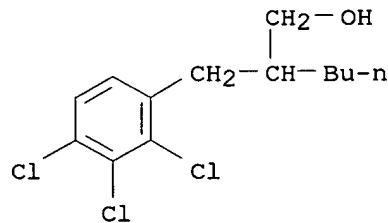
AN 100:103338 CA

TI Triazole and imidazole derivatives  
 IN Marchington, Anthony Frank; Lewis, Timothy; Clough, John Martin;  
 Worthington, Paul Anthony; Griffin, David Alan; Dalziel, John  
 PA Imperial Chemical Industries PLC, UK  
 SO Brit. UK Pat. Appl., 57 pp.  
 CODEN: BAXXDU  
 PI GB 2115408 A1 830907  
 AI GB 83-95 830105  
 PRAI GB 82-3707 820209  
 GB 82-11290 820419  
 GB 82-13652 820511  
 GB 82-31263 821102  
 DT Patent  
 LA English  
 GI



AB The plant growth regulation and fungicidal title compds. I [R = (un)substituted aryl, aralkyl, alkyl; R1-R6 = H, (un)substituted alkyl, cycloalkyl, aralkyl, or Ph; R7, R8 = H, alkyl, (un)substituted Ph, X = CH, N] and their acid addn. salts and metal complexes were prepd. Thus, p-ClC6H4C(:CH2)CH2CH2CH(OH)CH2CH2Me prepd. in 5 steps from 4-ClC6H4CHO and H2C:CHCO2Me, was brominated with Br to give 2-(4-chlorophenyl)-3-(bromomethyl)-5-propyltetrahydrofuran, which was treated with 1,2,4-triazole sodium salt to give I (R = 4-ClC6H4, R1 = Pr, R2-R8 = H, X = N) (II). At 0.05% II completely controlled Butrytis cinereo on apples. At 4.0 kg/ha I (R = 2-FC6H4, R1 = Me, R2-R8 = H, X = N) reduced the height of barley to 77% that of control.

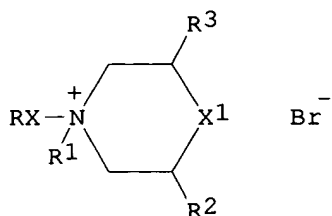
L11 ANSWER 12 OF 16 REGISTRY COPYRIGHT 1997 ACS  
 RN 85705-73-3 REGISTRY  
 CN Benzenepropanol, .beta.-butyl-2,3,4-trichloro- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C13 H17 Cl3 O  
 LC STN Files: CA, CAPLUS, USPATFULL



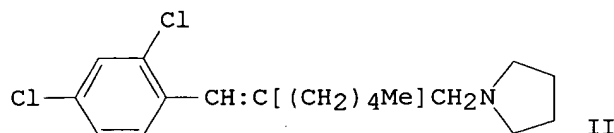
2 REFERENCES IN FILE CA (1967 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 99:122286 CA  
 TI Fungicides containing phenylpropylammonium salt and methods for control of fungi  
 IN Buschmann, Ernst; Zeeh, Bernd; Pommer, Ernst Heinrich; Ammermann, Eberhard  
 PA BASF A.-G. , Fed. Rep. Ger.  
 SO Ger. Offen., 36 pp.  
 CODEN: GWXXBX  
 PI DE 3135592 A1 830317  
 AI DE 81-3135592 810909  
 DT Patent  
 LA German  
 GI



I

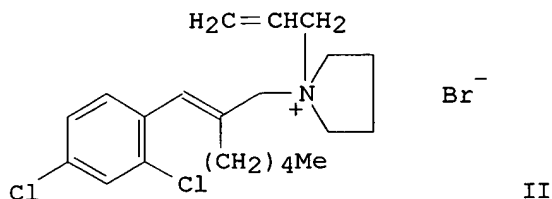
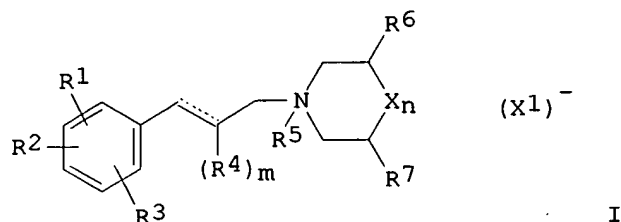


II

AB Title compds. I [R = (un)substituted Ph; R1 = alkyl, alkenyl, alkynyl, aralkyl; R2, R3 = H, alkyl, CH2OH, OH; X = alkylene, alkenylene; X1 = bond, alkylene, CO, O, S] were prepd. as fungicides. Thus, 2,4-Cl2C6H3CHO was condensed with heptanal to give 2,4-Cl2C6H3CH:C(CHO)(CH2)4Me, which was reduced to the alc., which was brominated and then condensed with pyrrolidine to give II. II was treated with CH2:CHCH2Br to give I [R = 2,4-Cl2C6H3, R1 = allyl, R3 = R4 = H, X = CH:C[(CH2)4Me]CH2, X1 = bond]. At 0.025%, I are more effective than captan against *Phytophthora infestans* on tomato seedlings.

#### REFERENCE 2

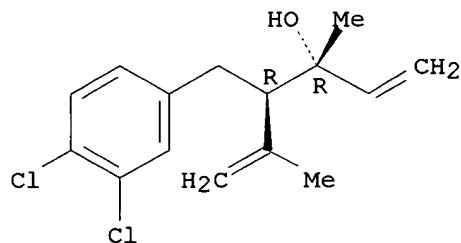
AN 99:22341 CA  
 TI Fungicides containing phenylpropylammonium salts and control of fungi  
 IN Buschmann, Ernst; Zeeh, Bernd; Pommer, Ernst Heinrich; Ammermann, Eberhard  
 PA BASF A.-G. , Fed. Rep. Ger.  
 SO Ger. Offen., 38 pp.  
 CODEN: GWXXBX  
 PI DE 3134220 A1 830310  
 AI DE 81-3134220 810829  
 DT Patent  
 LA German  
 GI



AB Quaternary ammonium salts I [R1, R2, R3 independently = H, (halo)alkyl, (un)substituted aryl or aralkyl, cycloalkyl, alkoxy, acyl, halo; R4 = alkyl, alkenyl, alkoxy, R5 = aliph. group, (un)substituted aralkyl; R6, R7 = H, alkyl, CH2OH, OH; X = CH2, O, S, CO, (CH2)2, CH2CHR8 (R8 = alkyl); m = 0-2; n = 0, 1; (X1) = anion non-phytotoxic acid], useful as agricultural fungicides (no data), were prepd. Pyrrolidinium salt II was prepd. in 5 steps from 2,4-Cl2C6H3CHO and Me(CH2)5CHO. Some of the I prepd. had a better fungicide activity at 0.05 than N-trichloromethylthiotetrahydrophallimide (no further information).

L11 ANSWER 13 OF 16 REGISTRY COPYRIGHT 1997 ACS  
 RN 67935-88-0 REGISTRY  
 CN Benzenepropanol, 3,4-dichloro-.alpha.-ethenyl-.alpha.-methyl-.beta.-(1-methylethenyl)-, (R\*,R\*)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C15 H18 Cl2 O  
 LC STN Files: CA, CAPLUS

Relative stereochemistry.



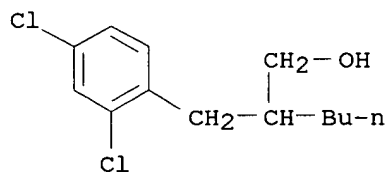
1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

#### REFERENCE 1

AN 89:163214 CA  
 TI A novel method for introduction of the isoprene skeleton into chloromethylarenes and -heteroarenes via a three-step sequence involving a solvent-assisted Claisen-Cope rearrangement  
 AU Fujita, Yoshiji; Onishi, Takashi; Nishida, Takashi  
 CS Cent. Res. Lab., Kuraray Co., Ltd., Kurashiki, Japan  
 SO Synthesis (1978), (8), 612-14  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DT Journal

LA English  
 AB Treatment of  $\text{RCH}_2\text{Cl}$  (I, R = Ph, substituted Ph, 2-furyl, 2-thienyl) with  $\text{Me}_2\text{C}:\text{CHCOMe}$  (II) and  $\text{NaNH}_2$  in liq.  $\text{NH}_3\text{-Et}_2\text{O}$  (1:1) gave .apprx.65-70% product, predominantly  $\text{MeCOCH}(\text{CH}_2\text{R})\text{CMe}:\text{CH}_2$  (III), whereas reaction of I with II in 55% aq.  $\text{NaOH}$  using a phase-transfer catalyst gave .apprx.80% of a mixt. of III and  $\text{MeCOC}(\text{CH}_2\text{R}):\text{CMe}_2$ . The Grignard reaction of III with  $\text{CH}_2:\text{CHBr}$  in THF gave .apprx.80%  $\text{CH}_2:\text{CHCMe}(\text{OH})\text{CH}(\text{CH}_2\text{R})\text{CMe}:\text{CH}_2$  (IV), thermal rearrangement of which, neat, at 170-90.degree., gave 55-9%  $\text{RCH}_2\text{CH}:\text{CMe}(\text{CH}_2)_3\text{COMe}$  (V), contg. 60-5% of E isomer; however, in the presence of 2 vols. of 1-methyl-2-pyrrolidinone at 190.degree., the rearrangement gave 78-83% V contg. 70-5% E isomer. The improved yield and selectivity is attributed to solvent assistance in the Claisen-Cope rearrangement.

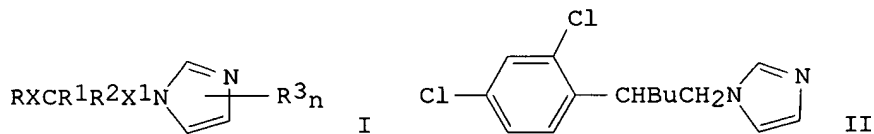
L11 ANSWER 14 OF 16 REGISTRY COPYRIGHT 1997 ACS  
 RN 61023-57-2 REGISTRY  
 CN Benzenepropanol, .beta.-butyl-2,4-dichloro- (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C13 H18 Cl2 O  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL  
 (\*File contains numerically searchable property data)



3 REFERENCES IN FILE CA (1967 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

#### REFERENCE 1

AN 90:87455 CA  
 TI 1-Substituted aralkyl imidazoles  
 IN Miller, George A.; Chan, Hak-Foon  
 PA Rohm and Haas Co., USA  
 SO U.S., 23 pp.  
 CODEN: USXXAM  
 PI US 4118461 781003  
 AI US 75-547291 750205  
 DT Patent  
 LA English  
 GI

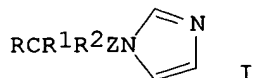


AB Imidazoles I (R = aryl, furyl, thienyl;  $\text{CR}_1\text{R}_2 = \text{C}_3\text{-8}$  cycloalkanediyl;  $\text{R}_3 = \text{C}_1\text{-4}$  alkyl, halogen,  $\text{NO}_2$ ; X,  $\text{X}_1 = \text{bond}$ ,  $\text{C}_1\text{-5}$  alkylene;  $n = 0\text{-3}$ ) (104 compds.) were prepd. Thus treating 2,4- $\text{Cl}_2\text{C}_6\text{H}_3\text{CH}_2\text{CO}_2\text{Et}$  with  $\text{IBu}$  gave 2,4- $\text{Cl}_2\text{C}_6\text{H}_3\text{CHBuCO}_2\text{Et}$ , which was reduced to the alc., mesylated, and treated with imidazole to give II. At 300 ppm II gave .gtoreq.97% control of Erysiphe polygoni on

beans.

REFERENCE 2

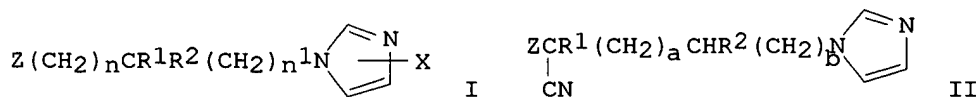
AN 90:87450 CA  
TI 1-Substituted aralkyl imidazoles  
IN Miller, George A.; Owen, Ronald P.  
PA Rohm and Haas Co., USA  
SO U.S., 22 pp.  
CODEN: USXXAM  
PI US 4115578 780919  
AI US 75-547291 750205  
DT Patent  
LA English  
GI



AB 1-(.omega.-Phenylalkyl)imidazoles [R or R<sup>2</sup> = H, Ph, halophenyl, alkylphenyl, alkoxyphenyl, nitrophenyl, aminophenyl, (methylthio)phenyl, (trihalomethyl)phenyl; R<sup>1</sup> = H, alkyl, alkenyl, aralkyl; Z = C1-5 alkylene] (104 compds.) were prepd. and showed fungicidal activity. Thus, alkylating 2,4-Cl<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>CO<sub>2</sub>Et with BuI and then redn. gave 2,4-Cl<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CHBuCH<sub>2</sub>OH, which was O-mesylated; treating imidazole with the mesylate gave I (R = 2,4-Cl<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, R<sup>1</sup> = Bu, R<sup>2</sup> = H, Z = CH<sub>2</sub>), which at 300 ppm. gave 90-100% control of various test fungi on beans.

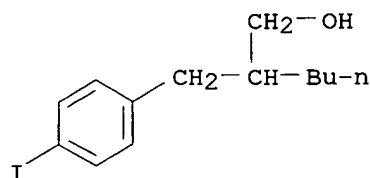
REFERENCE 3

AN 86:1093 CA  
TI Imidazole fungicides  
IN Miller, George Allen; Carley, Harold E.; Chan, Hak-Foon  
PA Rohm and Haas Co., USA  
SO Ger. Offen., 145 pp.  
CODEN: GWXXBX  
PI DE 2604047 760916  
PRAI US 75-547291 750205  
DT Patent  
LA German  
GI



AB The imidazole derivs. I (Z = halophenyl, heterocyclic radical, etc; n and n<sub>2</sub> = 0, 1, or 2; R<sup>1</sup> = lower alkyl, R<sup>2</sup> = H or Me; X = H, 2-Me, 4-NO<sub>2</sub>, etc) and II (Z = Ph, alkylphenyl, halophenyl etc; R<sup>1</sup> = H, alkyl, etc; R<sup>2</sup> = H, Pr, or Ph; a and b = 0, 1, 2, 3, or 4) and I and II salts and adducts are fungicides. Thus, 300 ppm 1-[.beta.-(2,4-dichlorophenyl)heryl]imidazole [58831-30-4] completely controlled Helminthosporium teres on barley, Grysiphe polygoni on bean, and Puccinia recondita on wheat, in pot expts. The synthesis of I and II is given.

L11 ANSWER 15 OF 16 REGISTRY COPYRIGHT 1997 ACS  
 RN 60075-88-9 REGISTRY  
 CN Benzenepropanol, .beta.-butyl-4-iodo- (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 2-(4-Iodobenzyl)hexanol  
 CN 2-(p-Iodobenzyl)-1-hexanol  
 FS 3D CONCORD  
 MF C13 H19 I O  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, TOXLIT,  
 USPATFULL  
 (\*File contains numerically searchable property data)



3 REFERENCES IN FILE CA (1967 TO DATE)  
 3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

#### REFERENCE 1

AN 92:163726 CA  
 TI Iodoaryl carbonates for use in methods in radiography  
 IN Newton, Barry N.  
 PA Lafayette Pharmacal, Inc., USA  
 SO U.S., 12 pp.  
 CODEN: USXXAM  
 PI US 4175544 791127  
 AI US 74-501169 740828  
 DT Patent  
 LA English  
 AB Carbonate esters of IC6H4OH and of iodophenylalkyl alcs., useful in radiocontrast media, were prepd. Thus, iodination of PhCH2OH gave 4-IC6H4CH2OH which with COCl2 gave 4-IC6H4CH2OCOC1; this on esterification with 1-hexanol gave 4-IC6H4CH2OCO2(CH2)5Me.

#### REFERENCE 2

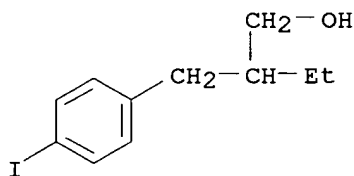
AN 87:134678 CA  
 TI Iodine-containing organic carbonates for use as radiographic agents  
 IN Newton, Barry N.  
 PA Lafayette Pharmacal, Inc., USA  
 SO U.S., 9 pp.  
 CODEN: USXXAM  
 PI US 4022814 770510  
 AI US 74-501169 740828  
 DT Patent  
 LA English  
 AB Iodoaralkyl alkyl carbonates, e.g. 4-IC6H4CHROCO2R1 (R = Me, H, etc.; R1 = Me2CH, hexyl, etc) and similar iodoaryl alkyl carbonates, useful as radiography contrast agents, were prepd. Thus, PhCH2OH was iodinated to 4-IC6H4CH2OH, which was treated with COCl2 and alcs. to give 4-IC6H4CH2OCO2R1.

#### REFERENCE 3

AN 85:171541 CA  
 TI Iodine-containing organic carbonates as investigative radiopaque compounds  
 AU Newton, B. N.

CS Res. Dev. Dep., Lafayette Pharmacal Inc., Lafayette, Indiana, USA  
 SO J. Med. Chem. (1976), 19(12), 1362-6  
 CODEN: JMCMAR  
 DT Journal  
 LA English  
 AB A series of 29 carbonate esters [ROC(:O)OR1:R = C2-C10 alkyl; R1 = p-IC6H4, m- and p-IC6H4CH2, 3,5-I2C6H3CH2, 3-NH2- and 3-AcNH-2,4,6-I3C6HCH2, p-IC6H4CH2CH2, p-IC6H4CHMe, p-IC6H4(CH2)3, p-IC6H4CHMeCH2CH2, p-IC6H4CH2CHEtCH2, p-IC6H4CH2CHBuCH2] was prepd. by reacting an alkyl chloroformate with an iodinated arom. alc. The approx. lethal dose of i.p. injections in mice was from <1 mg/kg to >15 ml/kg. As the alkyl part of the ester increased in size, toxicity increased. The m-amino and m-acetamido groups lowered toxicity of the triiodinated compds. Follow-up radiography showed complete elimination of the injected material in 1-2 weeks.

L11 ANSWER 16 OF 16 REGISTRY COPYRIGHT 1997 ACS  
 RN 60075-61-8 REGISTRY  
 CN Benzenepropanol, .beta.-ethyl-4-iodo- (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 2-(4-Iodobenzyl)butanol  
 CN 2-(p-Iodobenzyl)-1-butanol  
 CN 2-p-Iodobenzylbutanol  
 FS 3D CONCORD  
 MF C11 H15 I O  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, RTECS\*, TOXLIT, USPATFULL  
 (\*File contains numerically searchable property data)



4 REFERENCES IN FILE CA (1967 TO DATE)  
 4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

#### REFERENCE 1

AN 92:163726 CA  
 TI Iodoaryl carbonates for use in methods in radiography  
 IN Newton, Barry N.  
 PA Lafayette Pharmacal, Inc., USA  
 SO U.S., 12 pp.  
 CODEN: USXXAM  
 PI US 4175544 791127  
 AI US 74-501169 740828  
 DT Patent  
 LA English  
 AB Carbonate esters of IC6H4OH and of iodophenylalkyl alcs., useful in radiocontrast media, were prepd. Thus, iodination of PhCH2OH gave 4-IC6H4CH2OH which with COCl2 gave 4-IC6H4CH2OCOCl; this on esterification with 1-hexanol gave 4-IC6H4CH2OCO2(CH2)5Me.

#### REFERENCE 2

AN 89:173397 CA  
 TI Structure-toxicity relationships of iodinated aromatic carbonates and related compounds  
 AU Newton, Barry N.  
 CS Res. Dev. Dep., Lafayette Pharmacal Inc., West Lafayette, Indiana,



USA  
SO J. Pharm. Sci. (1978), 67(8), 1154-7  
CODEN: JPMSAE; ISSN: 0022-3549  
DT Journal  
LA English  
AB Structure-toxicity relations of iodinated arom. carbonates, carbamates, and esters are presented. The approx. LD of i.p. injections in mice was used for toxicity detns. Increasing the alkyl portion of the mols. reduced toxicity. M-amino and m-acetamido groups also reduced toxicity. Carbonates were preferred X-ray contrast agents because of their low viscosity and more rapid elimination.

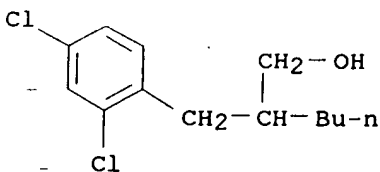
REFERENCE 3

AN 87:134678 CA  
TI Iodine-containing organic carbonates for use as radiographic agents  
IN Newton, Barry N.  
PA Lafayette Pharmacal, Inc., USA  
SO U.S., 9 pp.  
CODEN: USXXAM  
PI US 4022814 770510  
AI US 74-501169 740828  
DT Patent  
LA English  
AB Iodoaralkyl alkyl carbonates, e.g. 4-IC<sub>6</sub>H<sub>4</sub>CHROCO<sub>2</sub>R<sub>1</sub> (R = Me, H, etc.; R<sub>1</sub> = Me<sub>2</sub>CH, hexyl, etc) and similar iodoaryl alkyl carbonates, useful as radiography contrast agents, were prepd. Thus, PhCH<sub>2</sub>OH was iodinated to 4-IC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>OH, which was treated with COCl<sub>2</sub> and alcs. to give 4-IC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>OCCO<sub>2</sub>R<sub>1</sub>.

REFERENCE 4

AN 85:171541 CA  
TI Iodine-containing organic carbonates as investigative radiopaque compounds  
AU Newton, B. N.  
CS Res. Dev. Dep., Lafayette Pharmacal Inc., Lafayette, Indiana, USA  
SO J. Med. Chem. (1976), 19(12), 1362-6  
CODEN: JMCMAR  
DT Journal  
LA English  
AB A series of 29 carbonate esters [ROC(:O)OR<sub>1</sub>:R = C<sub>2</sub>-C<sub>10</sub> alkyl; R<sub>1</sub> = p-IC<sub>6</sub>H<sub>4</sub>, m- and p-IC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 3,5-I<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>, 3-NH<sub>2</sub>- and 3-AcNH-2,4,6-I<sub>3</sub>C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>, p-IC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CH<sub>2</sub>, p-IC<sub>6</sub>H<sub>4</sub>CHMe, p-IC<sub>6</sub>H<sub>4</sub>(CH<sub>2</sub>)<sub>3</sub>, p-IC<sub>6</sub>H<sub>4</sub>CHMeCH<sub>2</sub>CH<sub>2</sub>, p-IC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>, p-IC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>] was prepd. by reacting an alkyl chloroformate with an iodinated arom. alc. The approx. lethal dose of i.p. injections in mice was from <1 mg/kg to >15 ml/kg. As the alkyl part of the ester increased in size, toxicity increased. The m-amino and m-acetamido groups lowered toxicity of the triiodinated compds. Follow-up radiography showed complete elimination of the injected material in 1-2 weeks.

CN Benzenepropanol, beta.-butyl-2,4-dichloro- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C13 H18 Cl2 O  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB,  
USPATFULL  
(\*File contains numerically searchable property data)

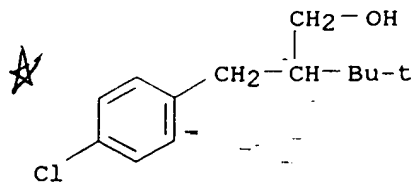


3 REFERENCES IN FILE CA (1967 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 90:87455 CA  
TI 1-Substituted aralkyl imidazoles  
IN Miller, George A.; Chan, Hak-Foon  
PA Rohm and Haas Co., USA  
SO U.S., 23 pp.  
CODEN: USXXAM  
PI US 4118461 781003  
AI US 75-547291 750205  
DT Patent  
LA English  
GI

RN 107021-89-6 REGISTRY  
 CN Benzenepropan-4-chloro-.beta.-(1,1-dimethyl-2-phenyl)- (9CI) (CA  
 INDEX NAME)  
 FS 3D CONCORD  
 MF C13 H19 Cl O  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXLIT



1 REFERENCES IN FILE CA (1967 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1

AN 106:115193 CA  
 TI 1-Acylimidazoles with broad-spectrum fungicidal activity  
 AU Manabe, Akio; Kirino, Osamu; Funaki, Yuji; Hisada, Yoshio; Takano, Hiroataka; Tanaka, Shizuya  
 CS Takarazuka Res. Cent., Sumitomo Chem. Co., Ltd., Takarazuka, 665, Japan  
 SO Agric. Biol. Chem. (1986), 50(12), 3215-17  
 CODEN: ABCHA6; ISSN: 0002-1369  
 DT Journal  
 LA English  
 AB The fungicidal activity of six 1-[2-(4-chlorobenzyl)-3,3-dimethylbutanoyl]azoles and related compds. were evaluated against powdery mildew of barley and gray mold of cucumber in pot expts. 1-[2-(4-Chlorobenzyl)-3,3-dimethylbutanoyl]imidazole (I) [89371-98-2] exhibited both curative and preventive activity against Erysiphe graminis and Botrytis cinerea. Replacement of the imidazole moiety of I with 1,2,4-triazole or introduction of a Me group at the 2- or 4-position of the imidazole moiety markedly decreased activity. The steric property around the 3-N atom of the imidazole ring is important for high activity and the 1-acylimidazole skeleton appears to be important for broad spectrum fungicidal activity.